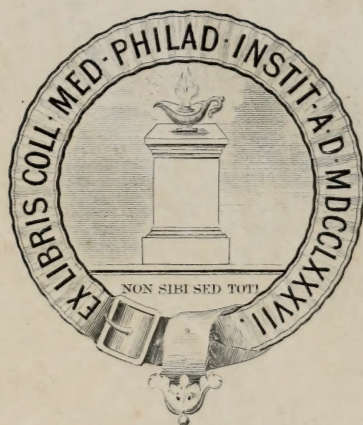




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Pages 563-578 are bound between pages 288-289





THE
CHICAGO MEDICAL
Journal and Examiner.

EDITORS:

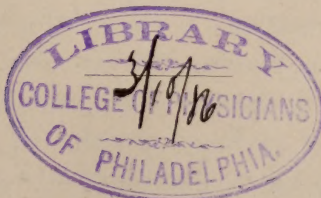
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VOLUME LI.

JUNE TO DECEMBER, 1885.



CHICAGO:
CHICAGO MEDICAL PRESS ASSOCIATION.
1885.

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THE CHICAGO MEDICAL JOURNAL AND EXAMINER.

VOL. LI.

JULY, 1885.

No. 1

ORIGINAL COMMUNICATIONS.

HAY-FEVER: ITS CAUSE AND CURE. *By* E. FLETCHER INGALS,
A. M., M. D., *Professor of Laryngology, Rush Medical College;
Professor of Diseases of the Throat and Chest, Woman's
Medical College, Chicago.*

[Read before the Chicago Medical Society, 25th May]

Synonyms—Hay-fever, Hay-asthma, Rose-cold, June-cold,
Idiosyncratic Coryza, Autumnal Catarrh, etc.

The subject of this paper is one which has been before the profession since it was discovered by Bostock in 1819, and within the last twenty-five years it has been the subject of careful research by numerous diligent workers; however, it is only recently that anything like a satisfactory solution of the difficulties attending its treatment have been reached.

The disease is met with commonly in the southern part of England, but is comparatively rare in other parts of Europe, while in Asia and Africa it is said that only Europeans are affected by it. In the United States it is a very common

affection which drives thousands from their homes every year, and makes miserable many more who are unable to make the change of climate which has hitherto been the only remedy for the malady.

Notwithstanding the generally received opinion that it is caused by the pollen of certain grains, examples of it are much less frequent among those living upon farms, where they are constantly exposed to the pollen, than among those living in villages, and these latter are less likely to suffer from it than the residents of cities.

This might, with considerable propriety, be called an aristocratic affection, as it seldom attacks any but those in comparatively easy circumstances, though it occasionally occurs among others. I have seen a few well-marked examples among the laboring class.

In this country, hay-fever usually makes its appearance about the middle of August and continues until the first frosts of the autumn, but in England it is most prevalent in June and July. However, numerous cases are observed in the early spring, and isolated cases, which might be better defined by the term, idiosyncratic catarrh, are occasionally seen in the winter months. These latter, though not excited by pollen are clearly due to similar conditions in the patient, which favor the development of attacks from a considerable variety of exciting causes.

During an attack of hay-fever, the mucous membrane covering the turbinated bodies is greatly swollen and usually, though not always, congested, and the congestion often extends to the palate, fauces, pharynx and conjunctivæ. Microscopic examinations of the secretions have discovered numerous vibriones, which by many, following the theory of Helmholtz*,

* Virchow's Archives. Feb., 1869.

have been thought to be the cause of the affection; but as the same objects may usually be found in the secretions of the nasal cavities at other times, it is thought that the presence of these is merely accidental. Various substances floating in the atmosphere have been found to act upon the respiratory mucous membranes of certain individuals in such manner as to give rise to the train of symptoms, which taken together represent the affection known as hay-fever. These substances do not cause the affection *per se*, but merely act as irritants, for any of them indiscriminately may affect some individuals, while only certain ones can excite the affection in others. The substances which have been found to be the most common exciting causes of the affection are the pollen of the grammaceæ which is found abundantly in the air in England during the months of June and July, when the disease is most prevalent, and in America by that of *Ambrosia Artemisiæfolia*, (ragweed or hogweed) when the plant is in full bloom during the months of August and September.

But besides these, the pollen of rye, wheat, oats, Indian corn and other grains are active with some persons, and still other agents may produce similar effects in patients affected by peculiar idiosyncrasies. For example, dust and the emanations from various drugs, flowers, animals, etc. These latter circumstances explain the origin of the peculiarly appropriate term *idiosyncratic coryza*.

These and other facts in the clinical history seem strongly to support the theory that cases of so-called catarrh in which the slightest provocation, such for example, as passing from a warm to a cold room or the reverse, or passing from the shade into the bright sunlight will excite frequent sneezing, as neither more nor less than examples of imperfectly developed *idiosyncratic coryza* or, as commonly known, hay-fever.

Why the substances mentioned should affect certain individuals and not others is a question which has engaged the attention of the profession for a long time, but it has only recently been satisfactorily answered. The more or less severe attacks in the same individual which may at different times be brought on by the same substance are analogous to the varying severity of the attacks of neuralgia which may be excited by exposure to cold; and, as in the latter instance, they undoubtedly result from the condition of the nervous system instead of from any special quality in the exciting agent.

When the nervous system is exhausted by over work, loss of rest, or imperfect nutrition, it becomes irritable and then agencies, which during perfect health might be innocuous, will in one excite neuralgia; in another an acute catarrh, and in a third a well developed attack of hay-fever,—the peculiar manifestation being determined by a peculiar susceptibility of certain nerves, which from some unknown changes, become acutely sensitive.

The theory of a nervous origin of hay-fever has been generally accepted by the profession, but it was vaguely referred to the whole nervous system and until recently no one suspected what now seems an established fact, viz., that the tract involved is sharply defined and usually more limited than that in a typical case of intercostal neuralgia.

In 1882, Daly*, of Pittsburgh, first called attention to the peculiar sensitiveness of certain portions of the nasal mucous membrane in individuals suffering from hay-fever, and later, clinical observations of Roe,¹ of Rochester, N. Y.; Sajous,² of

*Archives of Laryngology, Vol. II.

1. N. Y. Medical Journal, May, 1883.

2.. Medical and Surg. Reporter, December, 1883.

Philadelphia; Hack,¹ of Freiborg; and Allen,² of Philadelphia, and the physiological experiments of Mackenzie,³ of Baltimore, localized the sensitive tract for the majority of cases on the inferior turbinated bodies and the lower and back part of the septum. In a few individuals much more of the nasal mucous membrane is involved, and it is probable that, in very rare cases, the sensitive tract will be found to extend to the fauces and possibly to the bronchial mucous membrane, though usually during an attack the involvement of the pharyngeal and bronchial mucous membranes is due to the extension of the inflammation from the part first affected.

The later experience of the physicians just mentioned and that of several others, with my own observations, leave no doubt in my mind that the theory rests on a foundation of fact. In the majority of cases the posterior third of the inferior turbinated bodies and the lower part of the posterior two-thirds of the septum are the only sensitive parts, but in a considerable number of cases the sensitive parts are even more limited, though in some the middle turbinated body and the anterior portions of the septum and lower turbinated bodies are also involved.

The sensitive areas are not uniform in different cases. They are commonly found in patches which may be either in one or both nares, and, in some, they may be found on any of the parts already described.

Some years ago, Professor Helmholtz found certain vibri-ones in the secretions from the nares of hay-fever patients which he supposed were the cause of the disease; and he concluded that the local application of quinine, or other agents destructive

1. Wein. Med. Wochten., August, 1883.

2. Am. Jour. of Med. Science, January, 1884.

3. N. Y. Med. Record, July, 1884.

to these minute organisms, ought to cure the affection. This treatment has been extensively employed and numerous cases have been relieved; but unfortunately for the theory it has been shown that not only weak solutions of quinine but also those of soda or other non-irritating substances are equally efficacious, the germicidal properties of the solution having nothing to do with the result. The relief therefore must be attributed to cleansing of the nares from the pollen or other irritating particles or to the soothing influence of the remedy upon the terminal nerve-fibers in the mucous membrane.

Clinical experience points to the nervous origin of the affection and locates the principal changes in the branches of the spheno-palatine ganglion and nasal nerves; but we are unable to discover in what these changes consist. They seem, however, analogous to the condition in neuralgia and hyperæsthesia.

As a result of irritants coming in contact with these sensitive surfaces some change takes place in the vaso-motor nerve which is shown by sudden swelling of the erectile tissues in the nares. But substances causing hay-fever seem to act in some way differently from ordinary irritants, for, notwithstanding the swelling, in some cases there is no congestion whatever of the mucous membrane.

The primary effect of the irritation is to cause profuse secretion from the nares with swelling of the mucous membrane. This partially or wholly occludes the nares and necessitates mouth-breathing, with consequent irritation of the throat. The asthmatic symptoms which attend a considerable number of cases may be caused directly by irritation of the bronchial mucous membrane, but more probably they are usually the reflex result of the nasal obstruction and irritation.

Prolonged contact of the irritant will, in most cases, set up

an acute inflammation of the Schneiderian mucous membrane, which may extend to the mucous membrane of the eyes, ears, throat and bronchi.

In this country patients are usually attacked about the middle of August, and they soon learn to foretell the time of the attack almost to the hour. Generally the first symptoms are similar to those of a cold in the head, attended by frequent sneezing and burning pain with profuse secretion from the nose and eyes. Rarely the first symptoms are referable to the naso-pharynx and fauces. The eyes and nose soon become red, swollen and tender, and usually the temperature is slightly elevated. There is sometimes extreme suffering. Very soon nasal respiration is greatly interfered with, and in many cases asthmatic attacks add to the discomfort.

During the height of the attack the profuse discharge frequently causes erosion of the nostrils and upper lip; the conjunctivæ are occasionally much inflamed and the fauces are more or less congested. At the same time examination of the chest will often discover numerous bronchial rales. These symptoms ordinarily continue with greater or less severity from two to six weeks. In some cases they do not disappear until the first sharp frosts of the ensuing autumn.

In those who have previously suffered from the disease there is little difficulty in making a correct diagnosis; but in first attacks the affection may be readily confounded with an ordinary severe cold in the head. The principal points to notice in forming a diagnosis are: the periodicity of the disease, its sudden accession, the sensitiveness and swelling of the nasal mucous membranes; the asthmatic symptoms and the obstinacy of the attack as compared with an ordinary cold or spasmodic asthma.

The affection is not of itself serious though from suffering

and loss of rest the patient may become so exhausted as to fall an easy prey to other disease. Each attack may be expected to continue for several weeks only to disappear with the change in the season ; and the disease may be confidently expected to recur for many years ; though with some the tendency to it gradually disappears.

In the treatment of this affection as in that of all other intractable, self-limited diseases, many remedies have from time to time been vaunted as specifics, but all medicinal measures have been found sadly wanting in curative properties. Many times remedies have been employed in individual cases with apparently good results ; but upon the next case in which they have been tried they have either proven inert or actually injurious. This is readily understood if we consider that without any treatment the symptoms sometimes speedily disappear. In the first case the remedy may have been given just as convalescence was to begin ; while in the second the person may have been growing worse at the time.

Of a vast number of medicines recommended for internal or local use I have not time to speak ; but I may safely say that with few exceptions, which I will soon mention, they are of very little value and we should not encourage patients to expect relief from them ; though they may be tried in cases where the proper treatment cannot be carried out. Of the drugs which may be employed internally with a hope of warding off or lessening the severity of an attack, quinine, strychnine, arsenic and iron are of more or less value, from their influence in promoting the general health and building up the nervous system. Valerian, assafœtida and phosphide of zinc are also useful, for their anti-spasmodic effects.

In the inception of the attack benefit has been derived from the local use of a weak solution of quinine, carbolic acid or

tincture of opium, but these remedies will only help a small number of cases and they may utterly fail, even in these, on a second trial. These same remedies are recommended for the fully developed disease but usually they give very little relief.

Sedative powders composed of morphia, bismuth, iodoform, starch, etc., have sometimes given relief, while in other instances they have greatly aggravated the patient's sufferings.

For the asthmatic symptoms we may employ the same measures, which have been found useful in simple spasmodic asthma, chief among which are the inhalation of the fumes of nitre-paper, stramonium, hyoscyamus, etc., and the internal use of morphia and chloral ; but they will be found much less useful than for the simple spasmodic affection. In a word it may be said that the medicinal treatment of hay-asthma is in the highest degree unsatisfactory. As a result, all patients who can, resort to climatic treatment. In a large portion of cases this is effective in preventing the attack or at least in modifying its severity. However, the inconvenience of this course and the impossibility in many cases of having it followed have made physicians untiring in their efforts to discover some other means of preventing or curing the disease. These efforts have been rewarded by the discovery of a method of treatment which we believe will cure the disease in nine cases out of ten, if carried out before the attack begins. We have also found a remedy which promises much for the relief of fully developed cases.

A few weeks after the discovery of the anæsthetic properties of cocaine laryngologists* called attention to the peculiar

*Dr. Bosworth, of N. Y., was the first to point out this peculiarity, which he did in the N. Y. Medical Record, Nov. 15th, 1884; but before his article appeared I had already sent to press an account of my first experiments with the new anaesthetic, which was published in the Journal of the American Medical Association of the following week. In both these articles this property of the drug referred to and its application suggested in hay-fever and other affections which cause swelling of the nasal mucous membrane.

property possessed by the drug of causing speedy contraction of swollen mucuous membrane in the nares when applied in solution, or in the form of a powder. At the same time it was suggested that cocaine would probably relieve many of the distressing symptoms of hay-fever, but as yet no typical case has occurred on which it might be tried. However, it has been used with great success to relieve the annoyance caused by swelling of the turbinated bodies in acute and chronic rhinitis, and from a large experience with it in these affections, I feel, confident, that it will be of value in the treatment of the disease now under consideration.

Although typical hay-fever only occurs in the summer or fall months, isolated cases of idiosyncratic coryza are met with in early spring, or even in winter; which from their peculiar course and close resemblance to typical cases of hay-fever, seem to be identical with the latter excepting in the accidental exciting cause. These cases are attended by severe paroxysms of sneezing, with coryza and lachrymation, stuffing up of the nose and sometimes paroxysms of asthma—symptoms exactly like those of ordinary cases of hay-fever.

One such case came under my observation during the past winter, which although having no asthmatic breathing was in every other respect similar to hay-fever. In this case I gave the patient a 2% mixture of cocaine with starch, which was blown into the nose as soon as the paroxysm came on. It gave immediate and perfect relief, though it did not at once cure the attack, which lasted for several days. In this patient the paroxysms came on in the evening, but a single application was usually sufficient to check it at once; however, sometimes it was necessary to repeat the application three or four times during the night, the symptoms being relieved each time within half a minute. Another attack came on a couple of weeks

later which was promptly relieved in the same manner. This is the only case of idiosyncratic coryza that I know of which has been treated by this remedy; however, when considered with a large number of cases of hypertrophic catarrh, which I have relieved in the same manner, it gives me great confidence in recommending cocaine, for its temporary effects in hay-fever.

In hypertrophic catarrh I have found that patients who are obliged to use the remedy frequently, will, after a few weeks, cease to derive much benefit from it; though if discontinued for a time it will again act well. I presume the action would be similar in hay-fever patients. I conclude that although cocaine is a palliative agent of wonderful power, we cannot expect it to cure the disease.

Successful treatment by the galvano-cantery, which was first thoroughly tried by Dr. Roe, had, previous to last May, been applied by Drs. Roe, Allen and Sajous to about thirty cases, about 80 per cent. of which were reported cured, and the operators believed that all could have been cured if the treatment had been completed. During the past year other laryngologists have adopted the same treatment but its results have not been recorded, as most of the patients have not gone through a hay-fever season since the treatment. Many of the patients who were treated last summer began the treatment so late that it could not be completed before the attack came on and therefore they did not escape. My own patients, whom I considered but partially cured, as a rule went through the season with much less discomfort than formerly, and the only one in whom I had time to carry the treatment to the end had no return of the disease.

Since last August I have treated several cases thoroughly, and judging from their present condition and the experience

of others I expect them to go through the coming season without a recurrence of the attack.

As the disease is caused by a peculiar sensitiveness of the terminal branches of the sphenopalatine ganglion and nasal nerve which are distributed over the septum and turbinated bodies, the treatment to be effective must remedy this hyperæsthetic condition. The means adopted for accomplishing this consist of applications of glacial acetic acid, carbolic acid and other escharotics, and searing the membrane with the galvano-cantery.

Sometimes mucous polypi exist which must be removed ; hypertrophy of the turbinated bodies may be present, which must be connected or the spur of a deflected and thickened septum must be sawed off. The treatment by chemical agents will sometimes succeed but will often fail, while the galvano-cantery properly used cannot fail to remove the excessive sensibility and leave the membrane in a healthy condition. Successful treatment usually requires from ten to twenty sittings and should be completed before the attack comes on, therefore, as an interval of three to five days is desirable between each sitting, the treatment should be begun early in the season.

The plan which I adopt, and which has been found so successful by others, is to sear slightly with the galvano-cantery every portion of the peculiarly sensitive membrane ; using a small electrode and cauterizing but a small place at each sitting. I first carefully examine the nasal cavity with a slender, flat probe by which the sensitive spots are located. I then pass the cold electrode into the naris, and having reached the spot to be cauterized, turn on the electricity, whereby the wire is instantly heated. It is then applied for a fraction of a second to the diseased tissue, causing a small superficial burn. This operation is repeated at each subsequent sitting until all the

sensitive spots have been relieved ; care being taken not to burn too much at once lest it cause an uncomfortable inflammation. Even without an anæsthetic if a good battery* is used and proper electrodes, the pain caused by this operation is slight, in most cases, but some persons feel it severely for an instant. Heretofore, a few of these patients preferred to have the disease rather than suffer the treatment, and consequently they could not be cured ; but fortunately the anæsthetic properties of cocaine now enable us to treat all cases without pain.

In applying the cocaine I use a 4 per cent. solution in distilled water, which I drop upon the surface from a small syringe at regular intervals of about two minutes. Usually the parts will become anæsthetized in twelve minutes, occasionally eight minutes is sufficient to produce anæsthesia, but frequently it will require twenty or thirty minutes and, rarely longer. In one case in which I was producing anæsthesia for a different purpose it required over an hour's time and about five grains of the cocaine.

After the cauterization, when no anæsthetic has been used a spray of Dobells' solution should be employed to relieve smarting. During the intervals between treatment patients should keep the nares cleaned by insufflations or spray of soda and water or Listerine. The latter is sometimes highly useful for its antiseptic properties.

In conclusion, the following points seem to me established with reference to the treatment of hay-fever.

1st. Nearly all cases may be cured by systematic, thorough, superficial cauterization of the hypersensitive portions of the nasal mucous membrane, providing the treatment is carried out during the interval between the attacks.

*I employ a powerful two-celled bichromate of potash battery which was made for me by Sharp & Smith, of this city.

2nd. The most effective and least painful means of accomplishing this, is by the galvano-cantery.

3rd. Care must be exercised to treat every sensitive spot, and not to cauterize too large a surface at once.

4th. The operation may be made painless by a proper use of hydrochlorate of cocaine.

5th. In nervous subjects general treatment must not be neglected.

6th. The effects of cocaine in hypertrophic catarrh, and in the case of idiosyncratic coryza just reported, render it highly probable that it will give much relief in many cases of hay-fever.

64 State Street, Chicago.

THE CONTINUED PELVIC CURVE IN THE OBSTETRIC FORCEPS,
WITH REMARKS ON FORCEPS IN GENERAL. *By* EDWARD
WARREN SAWYER, A. M., M. D., *Chicago.*

[Read before the Chicago Medical Society, June 15th, 1885.]

The obstetric forceps is defined by Velpeau and by writers generally, as a variety of pincers intended to draw the fœtus from the mother. But the same definition applies to two distinct classes of extracting instruments whose offices are diametrically opposed to each other. The one, of which the cephalotribe may be taken as the representative, is devised for the sole purpose of destroying the contour of the head, and, as a result, the destruction of the fœtus. The office of the forceps, on the other hand, is to extract a living fœtus without injury. I may go a step further and say that the perfect obstetric forceps is an instrument with which it is practically impossible to injure the mother or fœtus.

The object of this communication is to call attention to several features which this instrument must possess to be the harmless extractor. Extensive series of measurements have been made, and repeated by numerous authorities, of the constant unyielding canal through which the fœtus is to pass, and of the constant unyielding head of the fœtus which is to be passed. From these observations certain constant dimensions are established, which are known as standard, for the bony canal and the head of the fœtus.

If we turn for a moment to a more particular examination of the forces invoked in the use of the forceps, it will be seen that they are practically two: Compression of the head, by which its dimensions are lessened within safe limits, and trac-

tion, by which the expulsive forces of nature are reinforced. Both these forces are conjointly invoked whenever this instrument is used.

It is the first-named force, that of compression of the head, which contains the element of danger to the offspring, and consequently that which should be under the complete control of the operator. Repeated observation has shown that the various transverse diameters of the foetal head may be lessened by compression a trifle more than one-half inch, without danger to the foetus. In fact, it is probable that in the great majority of labors, compression takes place to this degree, caused by the natural forces alone.

Given then the standard or usual size of the bony pelvis, the foetal head and the safe limit of compression, it becomes an easy task to construct an instrument, that portion of which that is to grasp the head within the pelvis, shall possess certain dimensions and be called standard. That such dimensions should be described, seems warranted from the foregoing; and yet I am not aware that any text-book contains such a description of standard forceps for the guidance of a student who is to select an instrument.

It may be stated in general terms that the various diameters of the flexed foetal head which would be grasped by the forceps in vertex labors, are three and three-fourths inches. Subtracting the margin of one-half inch for safe compression, there remains a space of three and one-fourth inches which should exist between the compression surfaces of the blades at the moment of greatest compression, or when the inner surfaces of the handles are in contact.

The instruments which I now exhibit have respectively two and one-fourth inches, Tannier, and two and one-fourth inches, Hodge. They are, therefore, not forceps, accord-

ing to our definition, but crushing instruments; and while their compressing force may be to a certain extent limited and controlled by the skillful hand, it is always dangerous in the hands of the ordinary practitioner.

This feature I regard second in importance to none other. It being accepted, the long diameter of the ellipse bounded by the conjoined grasping curves of the blades, should next be considered. Experience has shown that this ellipse should be five and one-half inches in length. It is open at both extremities. When the handles are closed the distal opening of the ellipse, corresponding to the separation of the tips of the blades, may be three-fourths of an inch. While the anterior opening corresponding to the distance between the shanks of the blade, at five and one-half inches from the tip, should be two and one-half inches. Should this distance be materially lessened, injury to the head cannot be avoided when compression is made. In these instruments already shown, which are not unlike many in this respect to be found in the shops, there is a separation of but one-half an inch at the tip, and an opening of one and one-fourth inches at the anterior opening of the ellipse in Tannier, and in reality no opening at all in the instrument of Hodge.

The width of the blade at the widest part may be one and one-half inches; but this is a point of less importance than that next in order. In selecting an instrument a straight edged ruler should be placed at right angles with the long diameter of the blade upon its inner surface, to determine if the outer edge of the blade and the border of the fenestra are on the same plane. If they are not the instrument should be rejected on this ground if upon no other; for upon this disparity depends in a great measure the injury inflicted to the fetal scalp.

The next important feature of the forceps is the lock. All devices for locking the blades belong to two classes. Both admit of almost unlimited lateral hinge movement, but one variety only, the mortise lock of Smellie, admits of a certain additional movement, backward and forward, by means of which the end of the handles can be slightly slipped past each other. The second variety of lock is a button, or thumb-screw which so fixes the blades as to preclude any degree of backward and forward movement of the handles. With this explanation these locks may be called respectively loose and fixed.

A simple inspection will enable one to determine which lock is safe, simple in construction and easy of operation, while the other is dangerous to the child, complicated and usually difficult of operation. The infinite superiority of the loose mortise is at once accepted in recalling a single fact in practice: It is only in the exceptional case that the blades grasp the head exactly upon its sides, or upon any two opposite and parallel planes. In the majority of cases the head plane occupied by one blade is oblique with reference to the other. It is obvious then that if no mobility exists in the lock that the blades press unevenly upon the head; indeed only one border of the blade may rest upon the head, and receive the entire compressing force which should be shared by both borders equally. As a result I have seen one edge sink to a shocking depth into the skull. Even a slight degree of mobility at the lock is considerably increased at the ends of the blades.

Before leaving this part of the instrument I desire to call attention to a special feature which, for want of a better name, I have called the heel of the blade. This rounded prominence upon the lower border of the blade, nearly opposite the beginning of the fenestra, finds its most dangerous exaggeration in the instrument known as the Davis forceps, although many

instruments perpetuate what I feel justified in pronouncing a dangerous fault. It increases the weight and bulky appearance of the instrument. It does not add to the grasping power of the blades; for the head is usually grasped at a point beyond this prominence. Above all it is a real menace to the woman's soft-parts, which it too often succeeds in tearing. In fact, in a given case when this instrument was being used by a highly competent practioner, I had an opportunity of an ocular demonstration of fact that the margin of the woman's vulva was torn by these heels before the head itself had reached the perineum.

It seems proper in this connection to call attention to another fact, viz.; that in compressing the fœtal head the closest imitation of nature is the safest to follow; and that a moment of compression should be at once followed by a loosening of the head. Consequently those instruments which admit of the handles being fixed together, by means of a screw or other device, can not be included among safe extracting instruments.

The remaining part of the forceps is called the handle, of which the length, largeness, shape and other particulars are as varied as the ingenuity of the inventors. In fact it is only in this part of the instrument that any inventor can claim any pronounced originality since the days of Smellie, who added the pelvic curve, and the mortise lock already alluded to.

In one particular, however, the handle should be considered. It is obvious that the greater the leverage possessed by the handles, the more easily is the compressing power of the instrument to be invoked. Consequently the length of the handles should be such as to allow the operator to reserve his forces for difficult traction.

The rounded space just in front of the lock, allowed by the

separation of the shanks, is a feature accredited to Ramsbotham, the elder. It admits of the introduction of the finger, or a napkin. It has special value, as a point of traction when the greatest degree of compression is not demanded. Besides this traction point Simpson has added the shoulders at the beginning of the handles, and others have copied from him in a ring to receive the finger, with some disadvantage.

The blades of an instrument to be entirely reliable should be constructed of the best of steel, which should be at least one-fourth of an inch square at the shank; from this size the material may be thinned to $\frac{3}{32}$ of an inch in thickness at the tip of the blades. Slighter material than this I have seen so yielding as to allow the blades to be pulled off the head.

The earliest cases of forceps labors, which occurred under my observation, demonstrated to me one fact which further experience has strengthened and confirmed. In passing through the pelvic excavation, the part of the head in the posterior half of the woman's pelvis, (the sinciput in the occipito-anterior vertex positions, the occiput, in the occipito-posterior) when the proportions are usual, is forced to sweep over the deep, curved plane of the posterior wall of the excavation, in the same time that the anterior part of the head is traversing the shallow anterior wall. There results from this inequality of distances traversed, a movement of extension of the foetal head in occipito-anterior positions, and the opposite movement, or flexion, in occipito-posterior positions.

If an index be fixed to the head, as for example the handles of a forceps, in such a manner as to follow the directions given to the head by the unaided efforts of nature, an irregular curved line would be described forward and upward which would have its termination, at the moment of the escape of the head, at a point near the umbilicus of the woman.

Throughout the length of the bony portion of the parturient canal, this curved line should be the guiding line to the attendant who attempts to reinforce the expulsive force of the uterus with the forceps. The curved direction which the handles will take is in an exact relation to the degree of descent of the head, and is to be learned practically at the bedside.

Of course it is not a question here of those rare cases where the forceps is applied when the head is yet unengaged above the superior strait.

When the head has almost freed the bony section of the canal, and is retained chiefly by the soft parts, the writer has for a long time in practice interfered with the natural movement of evolution executed by the head (extension or flexion) and has compelled the head to escape in a decidedly flexed state, thus presenting its smallest diameter to the ostium vaginae. This interference he holds to be the greatest safe guard of the perineum.

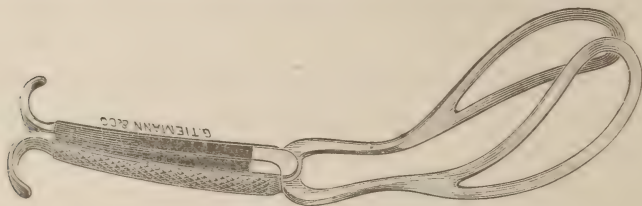
To more easily follow the curved line of descent indicated by nature, even for the inexperienced operator, I have continued the pelvic curve through the entire length of the forceps; selecting for my model the well-known instrument of Simpson as possessing the standard features already described. I have also added an entirely new handle which has been found efficient.



Continued pelvic curve in profile.

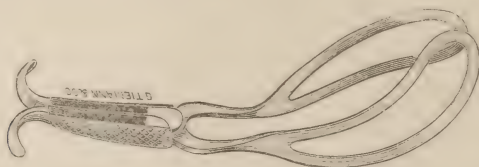
One advantage remains to be mentioned: In those cases

where the occiput presents posterior, and it is decided to deliver in this position, the curve of this instrument enables the operator to grasp the head well forward over the ears. Under these circumstances this is the only instrument which in my hands has not slipped over the occipital pole.



*Long Forceps, length along the curve 17 inches, weight 23 ounces.

The smaller instrument has all the essential features of the larger except force. It is only suitable, obviously, to very low head positions; but in my own practice and in that of others of my acquaintance its use is invoked many times often-er than that of the long instrument.



Short Forceps, length along the curve 12 inches, weight 8 ounces.

A feature which merits notice is the baking of the hard²rubber handles by the Tiemann process which greatly lessens the danger of the handles being carriers of filth and infection.

*First mentioned in the Chicago Journal and Examiner, May 1878, page 499. Note.—Exhibited to the American Gynæcological Society, Chicago, Sept., 1884.

THE NORMAL POSITION OF THE UTERUS AND ITS RELATION TO THE OTHER PELVIC ORGANS. *By* FRANKLIN H. MARTIN, M.D., *Chicago.*

Anatomy.—I will endeavor in discussing the anatomy of the pelvic organs not to go into unnecessary details, but confine myself to that part of the topography and anatomy of the organs that are subjects of dispute, or, that have been but very recently settled. In considering disputed and unsettled questions, the most that we have a right to do is to take into consideration our own observations, extract from theories, facts, and from the combined evidence impartially draw our conclusions. Among authors of greatest reputation the normal position and condition of the uterus is still a subject of doubt and discussion. To a casual observer it would not seem a difficult matter to settle definitely the true position and relation of the female pelvic organs. During life they admit of the most thorough examination in every way, and after death they are as available for examination apparently as other organs whose topography and anatomy have long been definitely settled.

However, if we take a more critical view of the subject we can discover good reasons for the diversity of opinion that exist. (1) On account of the great mobility of all the parts concerned—the bony pelvis that contains the organs is freely movable upon the long bones of the lower extremities, and the slightest movement here of the pelvis changes the relation of the pelvic organs with the horizontal to just that extent; the natural movements between the pelvis and the spinal column above changes to just that extent the relation of the pelvic organs and the other organs of the trunk. (2) Each organ of the pelvis has functions, the performance of which changes its

position and shape. All of these organs are distensible, and as they distend and contract in performing their natural functions, their normal position and relation may constantly vary—if all the pelvic organs are empty and collapsed, they occupy less room, and the vacuum caused by this contraction is filled, if not by the compressible connective tissue surrounding these organs, by the movable organs from above. (3) It is a question whether every respiration of a female does not change the relation of these organs. Every cough or sneeze makes its influence felt upon the relation of these organs to each other and the surrounding parts. (4) A great deal of pains has been taken by anatomists to make frozen sections of the pelvic organs in order to show accurately their relation. Even this has not been a success. It is found that death necessarily changes the relation of these organs—the circulation is stopped, which in life gives the various organs a fullness and erectility; the mucous and serous membranes, the ligaments and connective tissues lose their necessary elasticity; the muscular tissue of the various organs have lost their natural tonicity and are in an unnatural state of relaxation. Therefore, in consequence of these many changes incident to death, a frozen section cannot be entirely free from objections. True, certain devices have been carried out with commendable exactness in detail and earnestness to overcome even some of the objections to frozen specimens, but, as yet, it must be admitted that frozen specimens are not free from objections. (5) At last, if we put aside all other difficulties given above, we find that our methods of examination preclude the possibility of arriving at definite results. A digital examination at once separates the anterior and posterior walls of the vagina, transforms the normally flattened tube into an open cylinder; as we continue our examination, the conjoined manipulation, however carefully done,

changes the position or location of the uterus, influences the bladder and compresses the rectum. The most skillful specular examination changes the relation of almost every organ in the pelvis. After considering these few prominent reasons for our ignorance in regard to position of these organs, our uncertainty is not so much a matter of astonishment. There is no doubt, however, but that these difficulties will eventually be overcome by honest perseverance, and a great many of the unsettled questions satisfactorily adjusted, if we carefully consider the accumulated results obtained in the experiments of conscientious observers. At best, in medicine and surgery, it is only by repeatedly verifying clinical results claimed by others, that we are enabled to arrive at definite conclusions. In order to elucidate what seems to us the most rational views on the topography of the pelvic organs, we must first construct a diagram. (See page containing diagram.) The outlines of this diagram should correspond to a lateral view of an antero-posterior section of the bony frame of the pelvis, and they should be carefully proportioned by a general average of measurements deduced from the tables of measurements of FOSTER and LITZMAN—two authorities who have done conscientious work in unraveling the pelvic problem. Within this outline representing the frame of the pelvis will afterwards be arranged its contents, their position corresponding to the latest views of the best authorities.

The Pelvic Canals.—In considering the anatomy of these canals we will take the liberty of quoting AMBROSE L. RANNEY to considerable extent—from his series of excellent articles published in the *American Journal of Obstetrics*, commencing in the March number of 1883.

“ The transverse section of the pelvis (first devised by Henle to show the normal outline and relation of the three pelvic canals, viz.: the urethra, vagina and rectum) is now accepted as

accurate. It shows that the vagina and rectum are not open tubes, but that they exist when not distended as mere slits in the pelvic section. The long axis of the vaginal slit is transverse, and corresponds, as HART puts it, to the mouth of the woman in its general direction; that of the rectum is directed antero-posteriorly, thus forming a right angle with the long axis of the vaginal slit; while the urethra appears as a puckered and closed tube." This view, as favored by RANNEY, is not shared by all anatomists and gynecologists, and will be more fully dwelt upon in discussing the rectum.

The Perineum.—"This structure seems to be composed of a large excess of elastic tissue intermingled with the muscular fibers of the bulbo-cavernosus, sphincter-ani externus, transversus-perinæi and ischio-coccygeus muscles, and also some fibrous tissue derived from the ischio-perineal ligaments, the deep layer of the superficial perineal fascia, the perineal septum and deep perineal fascia. The result of the fusion of these structures is to produce a body which shall combine a great resistant power with a high degree of elasticity, two elements most essential to this part from its situation and the strain which it is called upon to bear. The perineal body prevents pouching of the anterior wall of the rectum, when the sphincters are contracted. THOMAS attributes to this body the function of a support to both the anterior rectal and the posterior vaginal walls."—(RANNEY.)

The Vagina.—"As has been previously stated, this canal appears as a transverse slit in that section of the pelvis devised by HENLE to show the relative position and appearance of the three pelvic canals. In the antero-posterior median section of the pelvis, it appears as a line only and not as an open tube." The vagina does not follow and conform to the concavity of the sacrum as depicted in many of the popular cuts. The

coccyx lies above the level of the symphysis pubis when the patient is in the erect position. The vagina extends ordinarily only to about the level of the sacro-coccygeal junction. The vagina does not lie parallel with the sacrum—its line of direction, if extended posteriorly, would cut the sacrum at the third and fourth sacral articulation. It therefore bears no apparent or real relation to the sacrum in regard to position; since it comes in no respect within its limits. Its general course is practically straight; or it may be said to be bent at either extremity, giving it the form of the italic letter *S*. The relation which the direction of the vagina has with the horizontal is yet the subject of considerable dispute among prominent authors. RANNEY is inclined to give it as about 40° with the horizon. HART makes the angle 50° . Scarcely two writers agree upon this point, although the tendency with the later writers is to make it more perpendicular. The anterior and posterior walls of the vagina are normally in opposition.

The Rectum.—The rectum is situated between the vagina and the sacrum and coccyx. It does not lie in the median line of the pelvis for its whole extent—being deflected to the right as it descends. It is necessary, therefore, in studying the anatomy and topography of this organ to have this in mind in looking upon an antero-posterior median section of the pelvis. It is necessary in order to appreciate its true relation to view it as depicted in a lateral section. RANNEY says: "Most of the cuts incorporated in the works of the greater anatomists, also in those dealing exclusively with the gynecological department, represent the rectum as piercing the muscular structure of the female pelvic floor obliquely, and reaching to the skin, while the anus is usually depicted as an open tube, affording no apparent obstacle during life to the escape of its contents. It will be perceived, if the observations of others agree with

my own, that the thickness of the pelvic floor in this region is about one inch." HART states that the anal canal perforates the muscular structure which forms the pelvic floor in a direction of nearly right angles to the vaginal axis.

The lower part of the normal rectum is usually empty and collapsed. The feces are prevented from occupying this part of the bowel by the semilunar folds of the mucous coat of the rectum called the valves of Houston. These folds are situated three or four inches from the anus and form a constriction at that point. The levator-ani muscle by its anterior fibers, which pass around the outlet of the vagina, form a vaginal sphincter.

The Uterus.—We now come to that much talked about organ—the uterus. Many of the best authors writing upon this subject state emphatically that it is impossible to give, with any degree of positiveness, a normal position to the uterus. At the same time these same authors close their chapter invariably with a minute description of the normal position and state of the uterus, and bring argument upon argument to sustain these particular views. A point that is yet a subject of grave discussion is the relation that the uterus sustains to the horizontal, when the woman is in a given position. The older works on anatomy describe and picture the uterus as occupying nearly a perpendicular when the patient is in an upright position—a view which at the present time cannot find recognition for a minute. Following this, and lasting until the very present, comes the other extreme—a position of extreme anteversion and flexion. We have extremes in both directions, and one cannot but think that fashion rules even in the disposition of this important organ. To my mind, after weighing the testimony of the best authors on this subject, it is impossible to come to any other conclusion than that we are safer to take neither extreme, but to be satisfied with median ground.

I do not make this statement without being, as I think, prepared to give more convincing reasons for this conclusion than a popular desire to be considered conservative.

SAPPEY maintains that the fundus of the normal uterus lies three-fourths of an inch below the plane of the pelvic brim. RANNEY's researches convince him that the fundus should be placed slightly above that plane. HART and BARBOUR say that the position of the uterus, with empty bladder and rectum, is such that it lies with its anterior surface touching the posterior aspect of the bladder—no intestines intervening; the cervix uteri looks downwards and backwards, and the uterus is slightly twisted as a whole on its long axis, so that the uterine end of the right Fallopian tube is nearer the symphysis than that of the left. According to SCHULTZE the uterus is extremely anteverted, the axis of the uterus being nearly horizontal with patient in upright position. FREISCH says the uterus is extremely anteverted, so that the fundus is directed toward the upper margin of the symphysis; the vaginal portion lies about at the point of junction of the sacrum with the coccyx—the entire uterus lying below the pelvic inlet.

After giving thus briefly the views of these authorities it is only doing them justice to mention that they *do* recognize, withal, that the uterus is a very *movable organ*, and that it is found normally in many positions. They emphasize that any fixed position would be unphysiological. I will quote CHAMBERLAIN'S language on this, as expressing well the general sentiment in regard to this point. He says: "The uterus has not *a* normal position, but many normal positions. The norm of the uterus is to be very movable, the most movable of any of the pelvic or abdominal viscera. Its distinctly normal position is that toward which it returns from all its excursions, and in which it rests in the equilibrium of all dis-

turbing forces." The uterus then has not *a* normal position, but it has a point to which there is a tendency for it to return after being influenced in any way from that position. It is very necessary, however, for us as gynecologists, to know approximately where that point is, in order to correct any influence that may be exerted and acting to prevent its returning to that point.

Although we are sometimes inclined to think on account of the deplorable state of health of the great majority of our American women, that nature has not exerted herself as much as she ordinarily does to perfect the organs peculiar to them—that in this particular *at least*, she has laid herself open to criticism—although such *seems* to be the case, our better judgment soon comes in and points out to us the fact, that nature has not been neglectful to woman, but that the difficulty lies in the fact that woman is negligent toward nature. Therefore, in this branch of physiology, as in all others, we will assume that nature endeavors to do her work in the most rational manner.

It is maintained by physiologists of note that the contraction and relaxation incident to the performance of the *normal functions* of the bladder and rectum influence invariably the position of the uterus. Although the uterus is a movable organ and easily influenced in its position, we cannot bring ourselves to think that it is *so created*, this all important *organ*, simply for the accommodation of the rectum and the bladder in their *normal* actions, but, to guard it against external violence and abnormal conditions of the surrounding organs. We *are* obliged to admit *this hypothesis*, however, if we accept the extreme anteversion theory of SCHULTZE, because he represents the anterior surface of the uterus as resting upon the collapsed bladder, and with the body of the uterus in this position the cervix must obviously occupy a position of extreme flexion, or encroach upon the rectal territory.

I believe if the anatomy and physiology of the rectum and bladder are closely studied in reference to their relation to the uterus, that it will be found in their normal workings they do not disturb this organ in the least. We should remember that the uterus at the cervix is supported by the recto-uterine ligaments, or folds of peritoneum which attach it to the sacrum, and prevent an excessive downward or forward displacement of this part of the uterus; opposite this support, and acting in exactly the opposite direction, is the anterior wall of the vagina and the fold of peritoneum (verico-uterine ligaments) which prevent an *excessive upward* and *backward* movement; while the broad ligaments spreading out from either side prevent excessive movements of the uterus laterally, or undue downward displacements. The uterus, too, is thoroughly surrounded by loose connective tissue, which assists in preserving its steadiness, and protects it from external influences. This connective tissue supports the uterus especially laterally, filling the spaces between the folds of the broad ligaments, passing down to the floor of the pelvis it forms a lateral supporting cushion to the vagina, which, in turn, by the assistance of the perineum, steadies and supports the uterus from below. We find then, that the uterus is very thoroughly supported without the assistance of the bladder and rectum. In looking closely see, too, how they can contract and relax in performing their normal functions without necessarily encroaching upon the uterus. Whether normally distended or empty they occupy about the same space, as far as influencing the uterus is concerned. The bladder collapses in a triangular shape with the long diameter in the antero-posterior direction; the rectum collapses with the long diameter in the anterior-posterior direction—each occupying at least as much space of the anterior-

posterior diameter of the pelvis when collapsed as when normally distended—and, it would require *inordinate abnormal* distention to make them occupy more of this space.

When we recognize so many wise provisions of nature in studying what is positively known in regard to the pelvis, we think that we are justified in assuming that nature has managed the doubtful points in the same wise manner. If such be the case, with our present knowledge of dynamics, we cannot refrain from pointing to the apparent incongruities in such cuts as FRITSCH'S, where extreme anteversion of the uterus is depicted, or on the other hand where the opposite version is pictured. To my mind unless one or the other of these alleged correct positions has actually and conclusively been proved to normally exist, by means of superior methods of examination, there is no rational excuse for the promulgation of such theories.

It would be expected that nature would place the uterus in a position in which it would best be enabled to sustain the weight of the super-incumbent organs and in which the jar and sudden shocks of the body could best be resisted with the woman in the ordinary upright position. But surely, such is not the case if we accept the above extreme views.

The intra-abdominal wave of pressure caused by respiration, coughing or sneezing—impulses given by sudden falls or jars, or even in ordinary locomotion, as it follows the vertical axis of the trunk, strikes first the anterior abdominal wall at a point between the umbilicus and the symphysis pubis, and is immediately deflected in a direction downward and backward into the cavity of the true pelvis. Here we come upon our first grave objection to an extreme anteversion or the opposite extreme—the perpendicular. In extreme anteversion the wave impulse would strike the posterior broad surface of the

body of the uterus, and drive it down upon the bladder and anterior wall of the vagina, while in the other position, the perpendicular, the anterior broad surface of the body would receive the impulse to an equal disadvantage, displacing the uterus backward and driving the cervix downward, while if the uterus occupied the position between these two extremes, the narrow crest of the fundus would receive the impulse in the line of the axis of the uterus and the force would become equally distributed through all of its supports. Here, too, the organ would not so directly receive the whole impulse, as it would be equally dispersed upon its sides, the posterior ligaments and anterior supports, and its lateral attachments would receive to equal extent their portion of the impulse.

Second :—The manner in which the bladder collapses, to my mind, precludes the possibility, or at least probability, of the uterus occupying normally the position of extreme anteversion. The bladder when collapsed, or when empty is a triangular shaped body—not flat like a plate. The base corresponds to its peritoneal surface, the apex corresponds to the urethra. The posterior or inferior surface corresponds to the anterior wall of the vagina to which it is intimately attached; the anterior wall corresponds to the symphysis to which it is loosely attached. It is readily seen, then, that the bladder distends only in the direction of the peritoneum or its one free surface. According to the extreme anteversion theorists the free surface of the bladder and the uterus are in apposition. If such be the case the uterus changes its position constantly as the bladder normally relaxes or contracts—this seems to me very improbable. I believe that this space is usually filled with the light coils of the small intestines.

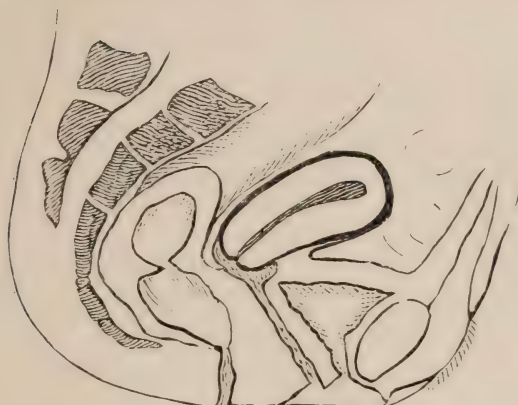
Third :—The broad ligaments receive their external attachments at a point about equidistant from the center of the

sacrum posteriorly, and the pubic junction anteriorly, in such a way as to divide the plane of brim of the true pelvis into about equal halves. If the body of the uterus occupies a position in the center of the pelvis on a direct line with the ordinary attachments of these ligaments, which it is at least rational to believe is the case, it occupies a position between the perpendicular of SAVAGE and the extreme anteversion of Fritsch.

Fourth:—With extreme anteversion, the cervix, with the fundus occupying a position behind the symphysis, would necessarily have to occupy a position far back in the pelvis, within three-fourths of an inch of the sacrum—with a normal normal conformation of parts this is impossible, without interfering with the rectum.

Fifth:—If we take the measurements of FOSTER and LITZMAN into consideration we can at once demonstrate the impracticability of the position given by Savage—the perpendicular. The cervix occupies a position normally at a distance of one and one-half inches from the sacrum, the rectum intervening. It is impossible for the uterus to assume anything like a perpendicular, with the cervix in this position, on account of the anterior curve of the sacrum above, which immediately necessitates an anterior version from the perpendicular of at least fifteen degrees.

I am justified, therefore, I think, in rejecting both the extreme anteversion theory and the perpendicular theory of the position of the uterus, and in doing so I present a schematic drawing that will be found to possess fewer theoretical objections.



Measurements used in constructing the above drawing were taken from Foster and Litzman. They are as follows:

Promontory of sacrum to upper border of symphysis.....	11.7 c. m.
“ “ “ “ nearest point “ “	11.0 c. m.
“ “ “ “ middle of third sacral vertebra.....	6.9 c. m.
“ “ “ “ sacro-coccygeal joint.....	10.8
Sacro-coccygeal joint to tip of coccyx.....	3.8
Promontory of sacrum to tip of coccyx.....	11.6
Highest to lowest point of symphysis.....	3.8
Upper border of symphysis to upper border of third sacral vertebra,	13.5
Lower border of symphysis to sacro-coccygeal joint.....	12.5
Lower border of symphysis to tip of coccyx.....	9.2
Tip of coccyx to horizontal line touching lower border of symphysis.....	2.0
Horizontal distance of angle of sacrum from line falling vertically from promontory.....	7.5
Horizontal distance of sacro-coccygeal joint from line falling vertically from promontory.....	7.3
Horizontal of tip of coccyx from line falling vertically from promontory.....	4.5

Additional figures showing the relation of the pelvic organs and their proportions as depicted in above drawing:

Inclination of axis of cervix uteri with horizontal.....	35°
“ “ “ “ body of uterus with horizontal.....	25 to 30°
Vaginal inclination with horizontal.....	55°
Inclination of line from inferior border of symphysis to tip of coccyx.....	12°

Inclination of line from superior border of symphysis to promontory of sacrum.....	55°	
Length of vagina from posterior <i>cul de sac</i> to forchette.....	8	c. m.
“ “ uterus.....	7	c. m.
“ “ neck of uterus.....	2	c. m.
“ “ body “ “.....	5	c. m.
Distance from sacrum to nearest point of cervix.....	4.5	c. m.
“ “ lower border of symphysis to nearest point of cervix,.....	6.3	c. m.
Width of cervix.....	2.6	c. m.
Thickness of cervix (antero-posteriorly).....	2.4	c. m.
Fundus of uterus projects above a line drawn from upper border of symphysis to promontory.....	5	c. m.
A line drawn from upper border of symphysis to sacro-coccygeal junction touches lower border of cervix.		

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EDITORIAL.

PROCEEDINGS OF THE AMERICAN MEDICAL ASSOCIATION'S
AMENDED COMMITTEE RELATIVE TO THE MEETING OF THE
NEXT INTERNATIONAL MEDICAL CONGRESS.

Pursuant to call, the American Medical Association's Amended Committee on the International Medical Congress met at the Palmer House, in this city, at 12:20 P. M., 24th June, 1885, with the temporary Chairman, Dr. R. BEVERLY COLE, and the temporary Secretary, Dr. JOHN V. SHOEMAKER, in their places.

During the evening session, Dr. A. Y. P. GARNETT, presented an opinion by the Honorable SAMUEL J. RANDALL, ex-Speaker of the United States House of Representatives, relative to the legal status of the committee then in session.

Mr. RANDALL's opinion indorsed the action of the Association. In a series of able editorials, which have recently appeared in the *Journal of the American Medical Association*, the same view has been taken by the editor of the Association's action at its last annual meeting in New Orleans, as that now expressed by the legal gentleman of the House of Representatives.

The committee met again at the Palmer House on the 25th and received the report of the sub-committee in regard to the Sections into which the International Congress should be divided. They recommended the decrease of the departments to sixteen, and, to accomplish this, grouped several classes of

subjects. The report was concurred in. The following were selected as Chairmen of the various classifications of subjects to be discussed: Histology, Professor Stanford E. Chaille, New Orleans; Anatomy, Professor Joseph Leidy, Philadelphia; Physiology, Professor J. C. Dalton, New York; Pathology, Professor Francis Delafied, New York; Practical Medicine, Professor J. M. Da Costa, Philadelphia; Surgery, Professor D. W. Yandell, Louisville; Gynecology, Dr. Robert Battey, Rome, Ga.; Ophthalmology, Professor E. Williams, Cincinnati; Otology, Professor C. J. Blake, Boston; Dermatology, Professor W. O. Hardoway, St. Louis; Laryngology, Professor J. M. McKenzie, Baltimore; Public and International Hygiene, Professor H. A. Johnson, Chicago; Collective Investigation, Nomenclature, Vital Statistics, and Climatology, Professor N. S. Davis, Chicago; Military and Naval Surgery and Medicine, Dr. David L. Huntington, U. S. A.; Practical and Experimental Therapeutics, Professor H. C. Wood, Philadelphia; Diseases of Children Professor J. Lewis Smith, New York. The committee adjourned to meet in St. Louis the first Monday in May, 1866, the day before the annual meeting of the Medical Association. The International Congress will occur in Washington in 1887. The date is not yet fixed, but will probably be some time in August.

It is in the interest of the medical profession of our whole country, and its good name, that selfishness and efforts at personal or partisan advancement should be subordinated, in the work of the Members of the Committee of Arrangements, to the importance of making a success of the next Congress. Their selection by the American Medical Association for this position of trust is no mean honor, but the responsibilities which attach to the position should be appreciated as well,

and their course of action should be such as to give undoubted evidence that they realize that fact. No unworthy motive should be allowed to influence the course of any individual member of the committee with any other view than the success of the Congress.

A formal invitation from the medical profession of the United States, by its representatives in the American Medical Association, was extended, through a duly appointed committee of that Association, to the members of the last Congress which met in Copenhagen, to hold the next Congress in the United States. That invitation was accepted. The foreign members of the next Congress will, in their attendance, be in some sense the guests of the medical profession of the United States. The good of the cause, for which the Congress will assemble, should be the governing aim of the committee having charge of the arrangements for it, but this high motive is supplemented by an obligation of hospitality, in addition.

The physicians who will come from foreign countries will neither understand nor sympathize with either side in differences of opinion held by factions in the United States, upon questions of ethics, and still less would they respect any acts of the profession, or of its committee, which might be prompted by selfish or partisan feeling that would conflict with the philanthropic and scientific aim of the Congress.

The character of a large portion of the committee is such that it should be a sufficient guarantee that no unworthy motive would be allowed to characterize the action of the committee as a whole, and that the officers selected shall be representative men, and that the sections formed, to supplement the work of the general sessions of the congress, shall be such as are best suited to advance the cause of scientific medicine.

The medical profession of the United States demands of its representatives—the Committee of Arrangements—that, by no act of theirs, shall the success of the Congress be interfered with nor the good name of the medical profession of our country be made to suffer at their hands, and it looks, hopefully, for just and honorable treatment of the important trust confided to that committee.

INOCULATION FOR CHOLERA AND YELLOW FEVER.

Telegraphic despatches to the daily papers announce brilliant results from the inoculation experiments of DR. FERRAN, of Valencia, Spain. It is stated that over six thousand persons have been inoculated with cholera microbes, as a prophylactic, in the province of Valencia.

A despatch, dated, Soudan, 29th June, contains the following words :

“The Spanish Admiralty authorities have ordered the cholera vaccination system of Dr. Ferran to be applied to all the officers and men of the Royal Navy.”

Professor H. C. Wood makes the following terse comment upon the subject in the *Therapeutic Gazette*, 15th of June, 1885.

“While the system is said to be entirely successful, we cannot see on what grounds that statement is based, as it is far too early in the season to judge of the severity of an epidemic, and no proof can yet be offered as to the immunity of the inoculated individuals from cholera. Before we can indulge our enthusiasm we must demand many further details.”

DR. CARMONA is experimenting in inoculation with yellow fever germs in Mexico. Subjects are not wanting, but the experiments are apparently not so successful as those of Dr. Ferran.

“The germ in Mexico and in yellow-fever does not prove as tractable as in Spain and in cholera.”

ATHEROMA OF THE CORONARY ARTERIES AND ITS RELATIONS
TO CERTAIN CASES OF CARDIAC FAILURE.

At the annual meeting of the Minnesota State Medical Society, held in St. Paul, June Eighteenth and Nineteenth, DR. ROBERT H. BABCOCK, of Chicago, addressed the members upon ATHEROMA OF THE CORONARY ARTERIES AND ITS RELATION TO CERTAIN CASES OF CARDIAC FAILURE. As the subject is an interesting one, we give an abstract of DR. BABCOCK'S remarks.

He disclaimed any expectation of presenting original or novel ideas, hoping only to call attention to a subject which appeared to him to possess great practical interest, yet was apt to be overlooked by the general practitioner in the press of more obvious matters. It was the subject of heart weakness (heart decay) in persons past middle age, in consequence of degeneration of the cardiac muscle resulting from atheroma of the coronary or nutrient arteries of the heart. The picture is a common one, though presented under varying aspects. The speaker then described briefly three classes or types of cases, which he considered illustrative of the disease. First, a strong man of about sixty years of age, complains of gradual loss of strength for a few months past and of slight breathlessness on exertion, possibly also of vague pain in the region of the heart : that is all. He has never been seriously ill and the physician fails to discover anything that proves satisfactory or that definitely implicates the heart. The pulse exhibits no marked deviation from normal and the cardiac impulse is in its right position, only perhaps a trifle weak. The heart sounds are free from murmur, the first being perhaps slightly less booming than natural and the second somewhat more pronounced. At a loss for more satisfactory explanation of his patient's condition, the physician

says he is only a little overworked, prescribes rest and tonics, and thinks he will improve. To his great surprise the man a few months subsequently falls unconscious and with deeply congested face and neck quickly expires; or perhaps in an unusually severe attack of angina pectoris his heart ceases to beat. It is pronounced cerebral or pulmonary apoplexy. It is however sudden cardiac failure.

In another class of cases, the physician is called to see a man past middle age, who upon unusual exertion was seized with great dyspnœa and is now panting for breath. The heart's action is feeble, pulse somewhat irregular, and there is more or less bronchitis; præcordial dullness may or may not be increased. The man has evidently over-exerted himself and is now suffering with asthma, the doctor thinks. A hopeful view of his case is entertained and remedies are prescribed. But, instead of improving, the patient goes on from bad to worse, and finally after months of distress from dyspnœa, dropsy, angina, etc., death mercifully terminates the struggle.

The third class is exemplified by a person of advanced age who has for years been unequal to much exertion by reason of weakness, breathlessness, vague, substernal pain and dizziness. The physician has no great difficulty in recognizing heart weakness, but attributes it to a general decay of vitality and and impaired digestion.

The real explanation of these and similar cases, DR. BABCOCK thought to be degeneration of the heart muscle due to atheroma or sclerosis of the coronary arteries. He then briefly described the pathology of atheroma and enumerated its causes as recognized by English and German observers, the chief being cardio-vascular strain and old age. This arterial degeneration is observed to affect most frequently the aorta and its large branches, the cerebral, coronary and splenic

arteries and those of the extremities. It is not unusual to discover after death, atheroma of the aorta and coronary arteries when it had not invaded the peripheral vessel sufficiently to have been recognized during life. The changes in the walls of the heart have been recently described by PROFESSOR LEYDEN, of Berlin, and the speaker derived what he had to say on this part of his subject from LEYDEN'S admirable paper. In the first group, LEYDEN places those cases where the atheromatous process has not been marked and the heart has materially suffered. In the second, there are discovered areas of acute softening due to thrombi or hemorrhagic infarcts. This condition often leads to rupture of the heart. Thirdly, there are areas of fibroid degeneration in the walls of the ventricles, particularly at the apex. In consequence of the thinning produced, aneurism (of the heart) not infrequently results. In the fourth group, there is a combination of the second and third. The clinical history of these cases is different, being either acute, subacute or chronic. LEYDEN considers this degenerative occlusion of the coronary arteries as the most frequent cause of angina pectoris.

DR. BABCOCK next spoke of the diagnosis. He regards it as not always easy or definite, particularly if the radial or other peripheral arteries be not discovered as atheromatous by the touch. Yet, a careful consideration of the history, symptoms and character of the heart sounds will often lead to a correct diagnosis. If the first sound over the left ventricle be more or less toneless in contrast to the second, which particularly in the aortic area, is sharp and ringing, and if the impulse be feeble and diffused, there is good reason to suspect degenerative change in the walls of the heart, although praecordial dullness can not be found increased.

DR. BABCOCK thought the treatment suggested itself, since

it is highly rational. It consists pre-eminently of rest and every means available for improvement in the nutrition of the heart. Arsenic and strychnia are admirable heart tonics, and the former, if pushed to a point just short of producing its physiological effects, is often found to lessen the frequency and severity of the angina. As remedies efficient for the relief of the pain during the attack the speaker recommended nitrite of amyl and a one per cent. solution of nitro-glycerine. Digitalis is invaluable for the purpose of slowing, steadying and strengthening the heart's action when dilation has gained the ascendancy and the pulse is irregular and rapid. In carrying off dropsy due to cardiac failure digitalis combined with squills is most effective. The doctor also discussed other remedies, as well as dwelt upon the those mentioned at greater length than has been done in this article.

Unfortunately the society did not participate in any formal discussion of the address.

SOCIETY REPORTS.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, June 15, 1885.—The President, Professor C. T. PARKES, M. D., in the chair.

A Successful Case of Nephrectomy.—Dr. R. G. BOGUE reported an important case of nephrectomy. The patient was a woman, aged thirty-six, single, who had suffered from several attacks of acute rheumatism with cordiac complications, and also for nearly one year with a pus-discharging sore on one arm. About six years ago, while doing laundry work, she severely sprained her back, and this was followed by frequent and painful urination, the urine containing pus, blood and mucus. The pain in the back increased during menstruation. These symptoms continued until 1882, when a swelling, accompanied by pain and soreness, appeared in the right lumbar region. This swelling was finally opened and gave exit to a large quantity of pus, and remaining open, continued to discharge pus until the time of the operation; pus, blood and mucus at the same time appeared in the urine, which was voided with difficulty. At one time there was so much clotted blood in the bladder that it was only dislodged by breaking up the clot with a catheter and washing out the bladder. Later there was nearly a closure of the opening into the lumbar abscess, and a fluctuating tumor appeared near the old one, which was opened, and gave exit to a quantity of foetid pus. From May 13 to August 27, 1884, there was free discharge

of pus through the lumbar openings and the bladder. At no time was there a urinous odor to the discharge from the loin. Whenever the discharge from the loin was greater, pus appeared in less quantity in the urine, and vice versa.

In the belief that there was an abscess of the right kidney, on August 27, 1884, Dr. Bogue made an explanatory operation by making an opening into the loin, along the course of and just below the twelfth rib, including in its track the sinus. He came upon a dark, fluctuating mass, which upon puncture discharged a quantity of pus, and on further examination was found to be the capsule of the kidney, divided into compartments, and distended with pus. The sac was adherent to the surrounding tissues, and, upon separation, bled freely. The adhesions were quickly broken up and a stout ligature placed around the attachment or peduncle, which consisted of the ureter and renal blood-vessels. This was done by the aid of a large bent probe armed with silk. This ligature completely arrested the hemorrhage. Near this ligature the peduncle was transfixed by a double thread of strong silk and tied in two parts, the mass cut away, with ligatures left long and with drainage tube, that served to drain the cavity, which was cleansed with a carbolated solution and the wound dressed with oiled-silk, gauze and oakum. The patient convalesced rapidly with the exception of an attack of rheumatism and one rather free discharge of blood from the bladder, which followed traction on the ligatures. The ligatures did not separate until Dec. 7. But little pus came with the urine after the operation. There is yet a small fistulous opening in the track of the wound. The patient is now comparatively well. The mass removed was a distended kidney capsule with calices so distended that there was obliteration of the kidney tissue except at one point where there was enough to identify the structure.

Professor C. T. PARKES remarked that an interesting point in the report is that in which is described the method by which hemorrhage was arrested, as the greatest danger in this operation is from hemorrhage. Czernay had a case in which the hemorrhage was so severe that he ligated the aorta. Operations on the kidney are becoming quite frequent. In an interesting paper Dr. Gross gives his observations of over two hundred cases, and limits the cases in which an operation is suitable. Professor Parkes said that he wished to call the attention of the Society to the fact that there is sometimes an anomalous distribution of the arteries to the kidneys. He had met two cases in which the arteries entered the kidney at the lower end instead of at the hilus, and this should be remembered in cases of nephrectomy and especially nephrolithotomy. Sometimes the renal artery enters the kidney by two branches.

In answer to several questions by members of the society, Dr. Bogue replied that no vertical incision was necessary; that the diagnosis was positive only after the operation, which was an exploratory one; that the ureter and renal blood-vessels were ligated in mass, and that in a suspected case, where there was a well-defined, movable tumor in the abdomen, unaccompanied by pain, with pus in the urine, and difficult urination, which was relieved by washing out the bladder, if there was a reasonable probability that it was a suppurating kidney, he would advise an operation.

The Continuous Curve Forceps.—Dr. E. W. SAWYER read an interesting and exhaustive paper on the Continued Pelvic Curve in the Obstetric Forceps, with remarks on forceps in general. He defined the perfect obstetric forceps to be an instrument with which it is practically impossible to injure the mother or fœtus, when skillfully used. In order that the forceps may be such a harmless extractor, after many years of observation and experi-

ence he had arrived at the following conclusions : First, that there should be a space of three and one-fourth inches between the compressing surfaces of the blades, when the inner surfaces of the handles are in contact. Any less space will fatally compress the foetal head. The long diameter of the ellipse, bounded by the conjoined grasping curves of the blades, should be five and one-half inches, the distal opening of this ellipse, to correspond to the separation between the tips of the blades, may be three-fourths of an inch ; five and one-half inches from the blade tips, the opening should be two and one-half inches. If these measurements are less, severe injury may result to the foetus. Second, in selecting an instrument, a straight-edged ruler should be placed at right angles to the long diameter of the blade, to determine if the center edge of the blade and the border of the fenestra are on the same plane, if not, such an instrument invariably injures the foetal scalp. Third, the loose mortise joint lock, which allows a backward and forward motion of the handles, and thus enables the obstetrician to properly adjust the forceps to the foetal head, is the only safe, simple and easily operated lock. Fourth, in compressing the foetal head the closest imitation of nature is safest method to follow, hence a moment of compression during a pain should be followed by loosening the grasp of the head, which cannot be done with those instruments which permit the handles to be fixed together. Fifth, the length of the handles should be such as to allow the operator to reserve his force for difficult traction. The rounded space just in front of the lock, which admits of the introduction of a finger, is of special value as a point of traction when a great degree of compression is not demanded. Sixth, the blades of the instrument should be of the best steel, at least one-fourth of an inch square, at the shanks, and gradually thinned to about three thirty-seconds

of an inch at the tips. Slighter material is so yielding as to permit the blades to be pulled off the head. Seventh, if an index be fixed to the foetal head, as, for example, the handles of a forceps, in such a manner as to follow the direction given to the head by the unaided efforts of nature, an irregularly curved line would be described forward and upward, which would have its termination, at the moment of the escape of the head, at a point near the umbilicus of the woman. This curved line should be the guiding line to the attendant, who attempts to reinforce the expulsive force of the uterus with the forceps. Dr. Sawyer then exhibited a forceps of his own invention, in which the pelvic curve is extended to the ends of the handles, to guide the operator in producing traction in the direction of the curved line above mentioned. He claimed that in those cases where the occiput, or sinciput, presents posterior, and it is decided to deliver in this position, this curve will allow the operator to grasp the head with the forceps well forward over the ears, without its slipping over the occipital poles.

In answer to several objections as to the feasibility of securing a perfect forceps, Dr. Sawyer stated that he did not claim his forceps to be perfect, but that he had copied the best features of other forceps, and thinks he has an instrument which will do less injury to the mother or child than any other forceps with which he is acquainted. He believes it to be absolutely safe for the child, and was not intending to speak of the indications for using forceps, or the manner of their use, but that he had endeavored to incorporate in his paper some points about forceps in general, which he had never read or heard taught, and he hoped they would be useful to all who wished to approximate as nearly as possible the ideal forceps.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, July 6, 1885.—The First Vice-President, C. W. PURDY, M. D., in the chair.

DR. ROBERT TILLEY exhibited to the society microscopical specimens of the fungus, *aspergillus glaucus*, taken from the human ear, an osteoma developed from the crusta petrosa of a canine tooth, and filaments, or mycelia, from the body of a tonsil.

While exhibiting the specimens, DR. TILLEY spoke as follows:

In describing to you the three specimens which are exhibited under the microscope, I will refer in the first place to the fungus—*aspergillus glaucus*—taken from the human ear. I have had this in my possession for about three years and have shown it to several of my acquaintances, but did not deem it of sufficient interest to exhibit it before. It is however an object which many have not seen before, although it is mentioned in every text-book on the subject. I have no intention whatever of entering into the question of the *aspergilli* in general relative to their influence when found in the ear. But I must say that my experience relative to the question leads me to think that its influence as a source of pain in the external ear is greatly exaggerated in the books. This specimen was taken from the posterior wall of the meatus of a little girl who had for sometime previously been afflicted with otorrhœa. The otorrhœa had however ceased and the fungi were readily recognized in lusty growth immediately on looking into the ear. There was however no pain complained of, the patient was brought rather for inspection than for the expectation of relief. You will observe that the fungi are growing on what by simple inspection might be called dried but otherwise normal wax. You will notice that the fungus consists of one straight

long stem surmounted by a round ball, very much like the top of an onion which has run to seed. It is commonly said, I think rather on theory than on observation, that they are caused by sleeping in low, damp apartments. The child from whom this was taken belonged to people in good circumstances and was well taken care of and was not living in damp quarters.

The next specimen, to which I will now refer, is the osteoma developed from the cementum or crusta petrosa of a canine tooth. I am very sorry that I cannot give you anything of the clinical history, because I believe it would be interesting, if known. In consequence of this, it is perhaps necessary that I should give a word of explanation as to how it came into my hands:—A friend was speaking to me of some one who had been subjected to the operation of drilling through the fangs of six teeth on account of what was called “ossification of the nerve.” In speaking to one of my acquaintances among the dentists about such a condition, I was presented with a tooth a section of which I exhibit to you. You will see, both macroscopically as well as microscopically, that the line of demarcation is well defined. You will further see that the general appearance of the tumor is that of bone, and that it differs greatly from the general appearance of the tooth proper. It is interesting to observe moreover that the canal, through which the nerve and vessels enter, is greatly diminished in its course through the tumor, consequently great pressure must have been exerted on the nerve. Before making the section, I had supposed that the canal was completely obliterated, so small is its opening at the end of the tumor. On looking at the specimen through the microscope, you will see very clearly that while the line of demarcation between the dentine and the proliferation of the crusta petrosa is well marked, and the lacunæ and canaliculæ of the bony structure of the tumor are well de-

monstrated, there is also a number of contorted tubules in the bony tumor which resemble, somewhat, the dental tubules. Haversian canals are of course not present, they never are in such growths. Although I have no clinical history to present, I may add that the usual clinical history is one of severe pain, which nothing but extraction seems capable of relieving.

The last specimen is one which I obtained from one of those little pockets which are often found in the tonsils. They seem to come and go, sometimes without giving any more inconvenience than a little discomfort. They are frequently associated with foetid breath, and in some cases the masses themselves are very offensive, in odor. In the present case, however, this was not so, there was no foetor. There was, however, an unpleasant sensation amounting to a positive discomfort running down the neck externally, in the direction of the sterno-cleido-mastoid muscle. On pressure around the base, the little mass popped out, suddenly, so that it came near going down the patients throat. In examining it, under the microscope, it proved to be one mass of filaments, very fine and containing spores in the body of the filaments, and associated with fat crystals.

I succeeded in staining them with methyl violet, but only after first extracting the fat with ether.

I have no theory to present, gentlemen, I simply exhibit to you what has been interesting to me. After the removal of the small mass I did not think any treatment was necessary, but as there was a little bridge of tissue more or less dividing the cavity into two sections, I divided the bridge with the electro-cautery.

The Treatment of Acute Coryza, was the subject of a paper by DR. J. A. ROBINSON. He said the literature on the subject of the treatment of acute coryza is scanty and of a stereotyped

nature. The profession seems to have arrived at two conclusions, first, that it is not a disease of sufficient severity and importance to command especial attention; second, that no plan of abortive or curative treatment has been sufficiently successful to cause them to investigate the subject further. However, in view of the fact that repeated attacks of acute coryza undoubtedly have a causal relation to pathological changes in the nares which it is difficult to remove, and that we are so frequently consulted by public speakers and singers who beseech us to abort or rapidly cure such acute attacks, it certainly deserves more than a passing notice.

The time-honored plan of aborting an acute coryza by the administration of a full dose of opium, an active purge and a potent diaphoretic has proven more disagreeable than efficacious. The plan, advocated by Dr. Ferrier, of blowing into the anterior nares a powder composed of morphia, bismuth and acacia, has been quite satisfactory in a few instances, but it is not free from the objection that, when successful, it often produces an unpleasant nausea. Its success is undoubtedly due to the sedative and astringent effect upon the inflamed mucous membrane.

What are the pathological conditions in the first stage of acute coryza? Briefly, there is dilatation of the capillary vessels, the arterioles being dilated and the venules engorged, inducing tumefaction of the mucuous membrane. This is accompanied by dryness and pain. Secretion is abolished. In reflecting upon these circumstance the thought naturally arises, whether, if we can employ such measures or drugs as will antagonize these abnormal states, we will succeed in aborting the disease. We have recently had added to our armamentarium a drug which more completely antagonizes in its physiological actions these pathological conditions than any other. It is the hydrochlorate of cocaine.

Its physiological actions have been demonstrated to be concisely as follows: when applied to a mucous membrane it is a potent although transient anæsthetic, a vaso-motor constrictor causing contraction of the arterioles and depletion of the venules, thus rapidly emptying congested tissues of a surplus of blood. This drug is also an astringent and has the property of lessening the secretion of muciparous glands. On studying the relation between the state of the nasal mucous membrane in the first stage of acute inflammation and after an application of cocaine, the theory was formulated that cocaine should prove useful in aborting acute coryza, and it was determined to try it on the first opportunity.

The details of the first experiment are as follows:

Miss S——, a soprano singer in one of our city churches, applied to me on the morning of February 22nd, and desired immediate relief from a "cold in the head." She complained that the previous night she had been exposed to a draft and awoke that morning with the cold, as evidenced by the fact that she could not breathe through the nose, and that her nose felt dry and painful, and she had lost the sense of smell. Inasmuch as she had to sing that night at a special service, she must have immediate relief.

Upon examination I found all the conditions incident to the incipency of an acute coryza. Her temperature was 102° F. with some acceleration of the pulse.

Febrifuges and a mild diaphoretic were prescribed. A local application of a four per cent. solution of hydrochlorate of cocaine was applied, as thoroughly as possible, to the congested mucous membrane, and the parts were sprayed, also, for some time with a warm alkaline spray, hoping thereby to reduce the hyperæmia. After having made another application of the cocaine, the patient was instructed to return home and

follow the same line of treatment and to return the following day. She did not return until three days later, when she reported, to my surprise and gratification, that she had been able to sing as desired, and that no symptoms of the disease had returned.

The success which attended this new departure, induced me to try it in other cases of acute coryza which were seen early, and it has almost always been successful. Of course, the number of cases which we see in their forming stage are few, on account of the fact that the patients do not seek medical advice for this affection until the disease is well advanced.

In the use of cocaine for the purpose of aborting an acute coryza there are some objections: it has to be applied often in order to maintain its action on the inflamed mucous membrane, and it is an expensive drug. I have found that the use of a warm alkaline spray serves to prolong the sedative action of the cocaine.

Of course dependence is not to be placed on local measures alone, but in addition proper attention is to be given to constitutional and hygienic treatment.

Dr. Tilley said he had used the hydrochlorate of cocaine in two or three cases of acute coryza with much satisfaction. According to one patient, an attack had ended with a single application. While he did not look upon cocaine as a sure cure for acute coryza, he thought it almost always did good. He referred to a serious accident which occurred to one of his patients during the use of cocaine. The patient was a boy aged twelve years, in whose nose a little cocaine had been used. After the first application he suffered a little nausea, which was not regarded as serious; after the second application the nausea was worse, but it was not until a third application had been made that the symptoms became alarming. These symptoms

were difficulty of breathing, syncope, irregular action of the heart, cold perspiration and loss of sensation in the extremities. Notwithstanding these symptoms were alarming, the boy recovered quite rapidly. He had noticed reports of cases in the journals where the same symptoms had appeared.

Dr. Weller said that he had had a good deal of experience in the use of coca, especially in the form of the fluid extract. He had taken large doses, in his own case he had used two pounds in a short time. Formerly he had considered it as harmless as tea, but latterly he had arrived at the conclusion that it is a powerful narcotic. The strange phenomena which follow use of cocaine in some cases, he believes to be due to the narcotic action of the drug, and that they would not appear if the drug was not given in large doses. He believed some patients to be peculiarly susceptible to the action of coca or cocaine, similar to the idiosyncrasies of patients in the use of belladonna, opium and alcohol. In the case mentioned, he believed the symptoms to have been the result of an over dose of cocaine. In his experience, he had found a two per cent. solution of cocaine strong enough, and urged the tentative use of the drug in the same manner as in the use of morphia.

Dr. WEBSTER did not wish to be considered skeptical, but he had some doubt as to the alarming symptoms in the cases mentioned having been due to the drug. Is it not possible they were the result of reflex processes in over-sensitive patients? He had a patient recently who vomited after holding a fever thermometer under her tongue.

Dr. PAOLI believed that the old treatment of acute coryza by giving the patient a hot bath, muriate of ammonia internally, and inhalations of camphor in hot water, or the oil of eucalyptus, combined with borax, to be the best, although he would acknowledge that cocaine would often relieve severe attacks in a short time.

Dr. S. J. JONES asked the author of the paper if he had used cocaine with a steam atomizer in acute pharyngitis, tonsillitis and laryngitis; also, if the applications of cocaine to different patients were from the same solutions and at brief intervals, so as to be able to state how a reliable solution acted on different patients.

Dr. Robison, in closing the discussion, said he did not advocate the plan of treatment as infallible or free from objections, nor did he neglect to use other means of cure if he thought they were advisable. As to the effect of cocaine on certain patients, he had a similar experience to Dr. Tilley in the case of a woman who had twice been operated on without cocaine for nasal polyps. No unfavorable symptoms occurred during these operations. At the third and fourth operations, cocaine was used and the patient was troubled with nausea, vomiting, palpitation of the heart and syncope. As no cocaine had been used in the first two operations, these symptoms in the third and fourth operations seemed to be, undoubtedly, due to an idiosyncrasy of the patient. He had not used cocaine with the steam atomizer, but he thought it feasible, if the drug were not so expensive. He prepares fresh solutions for each patient so as to preclude all possibility of failure of action by reason of deterioration of the solution by age. He had found the same package of cocaine to vary in its local and constitutional effect on different patients, affecting some more rapidly and profoundly than others.

Society then adjourned.

TRANSACTIONS OF THE CHICAGO GYNECOLOGICAL SOCIETY.

I. MARTIN. The Normal Position of the Uterus and its Relation to the Other Pelvic Organs.

Friday evening, 29th May, 1885. Regular Meeting.

The Society was called to order by the PRESIDENT. Dr. H. P. MERRIMAN.

I. An inaugural thesis, entitled, THE NORMAL POSITION OF THE UTERUS AND ITS RELATION TO THE OTHER PELVIC ORGANS, was presented by FRANKLIN H. MARTIN, M. D., (Chicago Medical College, 1880), and read by the SECRETARY, Dr. EDWARD WARREN SAWYER.

The extreme theories of Schultze, Fritsch and Savage were opposed for the following reasons :

1. In extreme anteversion, the wave impulse would strike the posterior broad surface of the body of the uterus, and drive it down upon the bladder and anterior wall of the vagina, while, on the other hand, (the perpendicular theory of Savage), the anterior broad surface of the body would receive the impulse to an equal disadvantage, displacing the uterus backward and driving the cervix downward, while if the uterus occupied the position between these two extremes, the narrow crest of the fundus would receive the impulse in the line of the axis of the uterus and all the force would become equally distributed through all of its supports. Here, too, the organ would not so directly receive the whole impulse, as it would be equally dispersed upon its sides and the posterior ligaments and anterior supports, and its lateral attachments would receive, to an equal extent, their portion of the impulse.

2. The manner in which the bladder collapses, to our mind, precludes the possibility, or at least the probability of the uterus occupying normally the position of extreme anteversion. The bladder, when collapsed, or when empty, is a triangular

shaped body,—not flat like a plate. The base corresponding to its peritoneal surface, the apex corresponding to the urethra. The posterior or inferior surface corresponds to the anterior wall of the vagina, to which it is intimately attached; the anterior wall corresponds to the symphysis, to which it is loosely attached. It is readily seen, then, that the bladder distends only in the direction of the peritoneum, or its one free surface. According to the extreme anteversion theorists, the free surface of the bladder and the uterus are in apposition. If such be the case, the uterus changes its position constantly, as the bladder normally relaxes or contracts,—this seems to us very improbable. We believe that this space is usually filled with the light coils of the small intestines.

3. The broad ligaments receive their external attachments at a point about equidistant from the center of the sacrum posteriorly, and the pubic junction anteriorly, in such a way as to divide the plane of the brim of the true pelvis into about equal halves. If the body of the uterus occupies a position in the center of the pelvis on a direct line with the ordinary attachments of these ligaments, which it is at least rational to believe is the case, it occupies a position between the perpendicular of SAVAGE, and the extreme anteversion of FRITSCH.

4. With extreme anteversion, the cervix, with the fundus occupying a position behind the symphysis would necessarily have to occupy a position far back in the pelvis, within three-fourths of one inch of the sacrum,—with a normal confirmation of parts, this is impossible without interfering with the rectum.

5. If we take the measurements of FOSTER and LITZMANN into consideration, we can at once demonstrate the impracticability of the position given by SAVAGE,—*i. e.*, the perpendicular. The cervix occupies a position, normally at a distance of one

and one-half inches from the sacrum, the rectum intervening. It is impossible for the uterus to assume anything like a perpendicular with the cervix in this position, on account of the anterior curve of the sacrum above, which necessitates an anterior version from the perpendicular of at least fifteen degrees.

DISCUSSION.

PROFESSOR W. W. JAGGARD was pleased with the selection of the topic, and its mode of treatment, but did not agree with Dr. MARTIN in all his conclusions.

BANDL had made a correct statement of the diversity of opinion upon this subject, in his essay on "*The Normal Position and the Normal Relationship of the Uterus, and the Pathologico-Anatomical Causes of the Symptom of Antelexion.*" (*Archiv für Gynækologie*, Band, XXVI. Heft, 3, 1884,) read before the GYNECOLOGICAL SECTION of the *Versammlung deutscher Naturforscher und Ärzte* in Freiburg, September, 1883.

"In the course of time, almost every position of the uterus, with the exception of prolapse, has been accepted as the normal by different anatomists and gynecologists, and particularly by the more eminent ones."

KÖLLKER (1882), from a series of examinations of the cadavers of girls, from ten to eighteen years old, has concluded that the uterus is not bent, nor curved upon itself, but is straight, and that its long axis corresponds with the principal axis of the small pelvis. Its position is variable within certain limits, depending upon the condition of the bladder and rectum. This opinion coincides closely with judgments of KOHLRAUSCH (1854), LE GENDRE, (1868), FREUND, CARL BRAUN, (1857), J. MARION SIMS, (1855), LANGER, (1881). PROFESSOR PAUL F. MUNDE, in his recent excellent work on "Minor Surgical Gynecology," favors these views to the extent, that he says, "with the woman in the recumbent position, the examining finger is

unable to touch the body of the uterus before or behind the cervix, if the uterus is normally situated."

BANDL, in the paper, to which allusion was made, confirms KÖLLIKER'S view. The evidence he furnishes is of a high order. His methods of investigation were:

1. The attentive examination of living women.
2. Examination and observation before and during the operation of laparotomy.
3. The bi-manual examination of the organ in cadavers, before and after abdominal section.
4. The comparative anatomical examination of many *uteri*.

Dr. PHILIP ADOLPHUS thought, with EMMET, that "there is no common standard by which to determine the proper position for the uterus in all women, but that in each individual there is a point, or plane, in the pelvis which the uterus should occupy when she is in a state of health and not pregnant." He referred in detail to EMMET'S "normal or health line," and to the pathological character of displacements above or below this line. It was a matter of relative insignificance whether or no the long axis of the uterus coincided with any particular pelvic axis.

In the concrete case, the sensations of the individual would indicate a normal or abnormal position.

PROFESSOR DANIEL T. NELSON said the uterus was fixed in a position of unstable equilibrium by the annular and other ligaments. It could move to a certain degree in every direction, and return to its original, normal position. Displacement above or below EMMET'S "health line" was productive of symptoms, if the uterus remained fixed in such a position, as was usually the case when violence caused the dislocation. Departure from the principal axis of the pelvis was a comparatively insignificant moment, viewed absolutely. The vagina

and perineum are not primary supports of the uterus, and only assume this function, when, as the result of the relaxation of the proper uterine supports, the organ is displaced downwards. This secondary character of the vaginal and perineal support was capable of demonstration by the examination of a woman in the erect attitude. Upon coughing or sneezing the uterus would descend and receive support from vagina and perineum, only to regain its original position when the excitant was removed. This remark applied exclusively to normal organs in normal position.

He wished to emphasize the statement that the rectum was not the normal receptacle for the faeces. Anatomy and physiology teach that in the normal condition the gut is empty up to the sigmoid flexure. The sigmoid flexure is a sort of valve to retain faeces.

He narrated the history of a case of retention of urine in a puerperal woman, in which the bladder was displaced towards the left iliac fossa, while the uterus was directed towards the right. He would like to ask the Fellows if this displacement, observed in a single case, corresponded with their observations.

PROFESSOR CHARLES WARRINGTON EARLE related the history of a case of retention of urine in a puerperal woman, the bladder displacing the uterus upwards and backwards. Upon the introduction of a catheter, four quarts of urine were evacuated and the pelvic viscera returned to their normal relations.

Dr. EDWARD WARREN SAWYER said the uterus had great latitude of movement antero-posteriorly and laterally; elevation above or depression below the normal plane, even to a slight degree, was productive of pain. The introduction of a pessary, which merely elevated the uterus when partially prolapsed, without altering flexion, was sufficient in many cases to afford complete relief.

While a student in the Medical Department of Harvard University, he had taken plaster casts of the vagina. Such casts were of uniform shape, while they differed in size. They were curved, convex posteriorly, concave anteriorly. They were never shaped like an S. The curve did not correspond to that of the anterior surface of the sacrum, but to the floor of the pelvis.

Dr. H. T. BYFORD thought Dr. SAWYER's experiments were faulty. When plaster of Paris was injected into the vagina, with the rectum empty, the vagina would act exactly as the rectum would under similar conditions.

THE PRESIDENT, Dr. H. P. MERRIMAN complimented the author of the paper on the careful, judicial mode of treatment of his difficult subject.

He agreed with Dr. ADOLPHUS, Dr. NELSON, Dr. SAWYER that elevation above or depression below a certain horizontal plane was of greater importance, in the production of symptoms, than deviation from the principal pelvic axis antero-posteriorly or laterally.

The normal position of the uterus was as variable as the quantity of blood lost at a menstruation. Every woman was a law unto herself. He referred in detail to ROBERT BARNES's theory of uterine support, and concluded by recommending BOZEMANN's plan of columning the vagina, when a hard rubber pessary could not be borne.

PROFESSOR CHRISTIAN FENGER, M. D. (Copenhagen, 1867), and FRANKLIN H. MARTIN, M. D. (Chicago Medical College, 1880), were then elected Fellows of the Society.

W. W. JAGGARD, M. D., *Editor*.

2330 Indiana Ave., May 29, 1885.

MICHIGAN STATE MEDICAL SOCIETY.

THE TWENTIETH ANNUAL MEETING OF THE MICHIGAN STATE MEDICAL SOCIETY occurred at Port Huron, beginning on Wednesday, June 10th, at 10:30 A.M.

The President, PROFESSOR DONALD McLEAN, of Detroit, called the meeting to order, and prayer was offered by REV. HASTINGS BLISS, of Port Huron.

GENERAL HARTSUFF, of Port Huron, made a brief address of welcome.

Many prominent medical gentlemen from abroad were invited to seats upon the platform.

The Executive Committee made their annual report, which was discussed and approved.

The programme was so very full that those who had papers to read were requested to make them as short as possible, that all might be heard.

Dr. O. B. Campbell, of Ovid, read an interesting paper on "Migraine," which was discussed by Dr. Smart, of Hudson.

Dr. Woodworth, of Tecumseh, read a paper entitled "Treatment of Fracture." Dr. De Camp, of Grand Rapids, led in the discussion, which was interesting and spirited.

Dr. Ramsey reported that he had received a congratulatory telegram from the Maine Medical Society, which was then in session. The telegram was read, and a similar dispatch returned.

Dr. Hugh McCan, of Lapeer, read a paper on "Plaster of Paris in the Treatment of Fracture."

Dr. H. O. Walker, of Detroit, read a paper of great interest on "External Perineal Urethrotomy," which was discussed by Dr. Kimball, of Jackson.

The afternoon session was called to order by President McLean, and Professor McGraw, of Detroit, read an excellent paper "On the Origin of Cancers and Tumors." He presented a patient

from whom he had removed the thyroid gland, and one patient from whom he had removed the entire left clavicle. These cases were of great interest and drew out quite a discussion.

Dr. Lundy, of Detroit, read a paper on "Iritis and its Relation to Certain General Diseases." Dr. Brodie opened the discussion, followed by Dr. Bennett and others.

At 4 o'clock, the discussion of the Treatment of Fractures was taken up by Dr. Kingston, of Montreal, followed by a number of gentlemen of large experience in this line of surgery.

Letters and telegrams of regret were received from Dr. Tye, of Chatham, Dr. Edwards, of London, Dr. Reeves, of London, Dr. Russell, of Toronto, Dr. Gripe, of Toronto, Dr. Dupuise, of Kingston, Dr. Beemer, of London, Dr. Woodruff, of London, Dr. Howard, of Montreal, Dr. Phelan, of Kingston, Dr. Covington, of Toronto, Dr. Burgess, of London, Dr. Rauch, of Springfield, Ill., Professor Goodale, of Philadelphia, and Dr. Jackson, of Chicago.

Dr. George K. Johnson, Chairman of the Committee on Reorganization, reported quite a number of important changes and recommended that they be adopted. The report was ordered printed and laid on the table for one year.

Dr. Casten, of Detroit, read a paper on "Sterility." It was discussed by Professor Palmer, of Ann Arbor, Professor Ochterlooney, of Louisville, Ky., and others.

The evening session was called to order at 8:30 o'clock.

President McLean introduced Dr. Morse, of the Ohio State Medical Society.

Dr. Cook, of Muskegon, was called to the chair, and Professor McLean delivered his address, which was an able effort and well received.

Professor Palmer read a very exhaustive paper on "The

Physiological and Therapeutical Action of Alcohol." There was a large audience present to hear this paper, and the discussion of it was quite spirited. Dr. Whelan, of Hillsdale, led in the discussion, and afterwards read a paper entitled "The Possibility of a Concurrent Opinion upon the Physiological Effects of Alcohol."

The following gentlemen were proposed for membership: Dr. Merritt, of Fort Gratiot; Dr. Wilson, Port Huron; Dr. Chittock, Detroit; Dr. Smith, Detroit; Dr. Ingals, Detroit; Dr. Taylor, Loomis; Dr. Blanchard, St. Clair; Dr. McLaughlin, Cass City; Dr. Northrup, Port Huron; Dr. Stockwell, Port Huron; Dr. Clancey, Port Huron; Dr. Taylor, Mt. Clemens; Dr. Tibbitt, Linden; Dr. Chamberlin, Flint; Dr. Thompson, Flint; Dr. McIntee, Melin; Dr. Moors, Richmond; Dr. Ruch, Ypsilanti.

The Executive Committee at Port Huron consisted of Dr. Mills, Dr. Smith, Dr. McClintock, Dr. Plats and Dr. Stockwell, and these gentlemen had arranged to entertain all who were in attendance at the meeting.

Dr. Stockwell, of Port Huron, the first President of this Society, was warmly congratulated.

The Thursday morning session opened promptly at 9:30.

The papers of Professor Palmer and Dr. Kinne, of Ypsilanti, were discussed at length and referred.

Dr. Smart reported a bill to Regulate the Practice of Medicine and Surgery, which was referred to a committee of five, and later in the day that committee reported favorably, and the Legislature will be asked to pass the bill.

Dr. Smart also suggested that a bill be prepared to the effect that all proprietary medicines must have their working formula on the labels and the bottles, and that the bill shall be prepared and presented to our next Legislature.

Dr. De Camp, of Grand Rapids, read a paper entitled "Germ in Medical Practice," and the paper was discussed by Dr. Shurley, of Detroit.

The following officers were elected for the coming year:

President.—Dr. E. P. Christian, of Wyandotte.

Vice-Presidents.—Dr. Patterson, of Charlotte; Dr. Griswold, of Grand Rapids; Dr. Carstins, of Detroit; Dr. Alvord, of Battle Creek.

Secretary.—Dr. Ranney, holds over.

Treasurer.—Dr. Smart, of Hudson.

The report of the Treasurer, Dr. Smart, is that the receipts of the year was \$1,382.10; expenses, \$407.33; on hand, \$974.77.

Dr. Kinne, of Ypsilanti, read a paper on "Post Partum Hemorrhage."

Dr. Stockwell read a paper on "Functional Paralysis due to Malarial Poison."

Dr. Hemingway, of Kalamazoo, read a paper on "Students' Eyes."

Dr. George, of Ann Arbor, read a paper on "Abscess of the Cerebellum."

Dr. Sullivan, of Ann Arbor, read a paper entitled "Atresia of the Vagina with Loss of the Urethra and Base of the Bladder."

These papers were all discussed and referred to the Publication Committee.

At 4:30 the Society, and the invited guests, took the steamer "Conger" for a ride into Lake Huron, and returned to the Oakland House in the evening and enjoyed a fine supper, by invitation of Dr. Blanchard. Dr. McLean and Dr. Stockwell responded to the toast "Our ex-Presidents." Dr. Morse, Dr. Kingslin, of Montreal, and Dr. Ochterlony, of Kentucky, responded to "Our Guests." Dr. Ward read a paper entitled

"The Professional Dude." "New Members," was responded to by Dr. Frothingham and Dr. White, of Detroit.

The Society returned to Port Huron at a late hour, each member delighted with Port Huron and satisfied that the present session had been one of the most satisfactory that the Society had ever held.

CLINICAL REPORTS.

MERCY HOSPITAL CLINIC. *Service of* EDMUND ANDREWS, M. D., LL. D. *Professor of Clinical Surgery in Chicago Medical College.*

CASE I. *Total obstruction of the Colon for four months. Colotomy.*—This remarkable case was previously under the care of Dr. Le Duc, of Lagrange, Ills., who sent it here. The patient states that some years ago, while living in England, she had a large tumor removed by way of the vagina while under the influence of chloroform. On awaking she saw the tumor, which appeared to her as large as a "bullock's heart." She had a vague idea that it was perhaps an ovarian tumor, but as there are no marks of incision on the abdomen, it was probably a uterine growth. After the operation there was a gradual diminution of frequency of the fecal evacuations, until they at last occurred only once in a week or two. Some months ago there was an attack of inflammation in the region of the sigmoid flexure. Last winter the movements of the bowels became still less frequent, until in March, 1885, there was only one evacuation, and that was the last she ever had. She continued to take food moderately, retaining it for a time, but always vomiting up the remnants of it at last. Dr. LeDuc

witnessed the vomiting repeatedly and pronounced it decidedly stercoraceous, even to having a cylindrical form, as if molded in an intestine. He is of the opinion that the watch kept on her case has been so long and thorough, as to exclude the possibility of a successful hysterical deception. Granting, then, that the history is not erroneous, this woman has been four months without an operation of the bowels. She presented at clinic an appearance of mild invalidism, but by no means of desperate emaciation and exhaustion, and she was able to walk about freely. On examination, the rectum was found absolutely clean of all fecal matter, and Dr. LeDuc had repeatedly examined with the same result. There was no stricture within nine inches of the anus. There was no induration nor tumor to be felt in the abdomen, and there was a moderate layer of fat under the abdominal integument. In consideration of the history, I judged that there was obstruction of the colon at or near the sigmoid flexure. I therefore performed lumbar colotomy, in the usual way, on the left side. I was disappointed to find the colon, when opened, absolutely destitute of any fecal contents. The patient was placed in bed, and experienced a considerable diminution of the tendency to vomit, but the constipation continued. Being in bed, it was easy to prove that there was no hysterical deception this time. However, on the sixth day after the operation, she had three free evacuations from the artificial anus. Another period of inaction ensued, but on the fourteenth day the bowels moved again, and on the fifteenth day they moved once or twice more. The vomiting is slight, but has not altogether ceased. The case is still under observation, and may be the subject of future report.

CASE 2. *Carcinoma of the Pylorus. Laparotomy.*—This patient has a small, hard, and movable tumor between the xiphoid

cartilage and the umbilicus. He had been rapidly losing flesh, but still walked about. An exploratory incision was made, with antiseptic precautions, in the linea alba. The tumor lay behind the lesser omentum, compelling me to pass through that membrane. Its base firmly embraced the pylorus, and adhered strongly to four inches of the lower border of the stomach. Exploration with the fingers, showed enlarged and indurated mesenteric glands in the vicinity. As the infection of the glands rendered a cure impossible, it was useless to put the patient to the perils of an excision of the pylorus, so that it was necessary to desist, and close up the incision. The patient recovered from the operation without any signs of peritonitis.

In Vienna the famous excisions of the pylorus performed for this disease are being abandoned. In fact, it is impossible to justify their performance. At present, Billroth is experimenting on a temporary alleviation by opening the small intestine, and stitching it to an orifice in the stomach, thus providing a route for the food, but leaving the disease untouched. Thus far most of the patients appear with great punctuality in the dead house, though a few survive a little longer, until the disease kills them.

CASE 3. *Litholapaxy*.—This patient is a young man in fine health. The stone was very small, measuring less than a centimeter in diameter. On being seized and crushed with a lithotrite, almost every particle of it was drawn out in the jaws of the instrument, so that the evacuator next inserted in due course of the operation washed away only a few fine grains of sand. The patient recovered in a few days. This is my twenty-sixth case of litholapaxy, with only one death.

CASE 4. *Litholapaxy*.—The patient came to the clinic from a distant State, and in an exhausted condition from malarious poisoning complicated with cystitis. He had been mostly con-

fined to his bed for a month and a half. Examination showed a stone in the bladder three-quarters of an inch in diameter, which was crushed and washed out at one sitting under the influence of ether. The operation was done in the presence of warm carbolized water, which by its benumbing influence on the nerves of the bladder, powerfully prevents shock, as well as septicism. Slight inflammation followed with a maximum temperature on the second day of $101\frac{1}{2}^{\circ}$ F. This rapidly subsided under the use of quinine, morphine and carbolized injections. One of the subsequent examinations detected a small remaining fragment of stone, which being removed, the patient was freed from all trouble, and was able to travel at about the thirty-fifth day.

ABSTRACTS AND EXTRACTS.

USES OF TRAUMATICINE.

Dr. C. Costa calls attention in *La Salute* to the beneficial effects obtained by traumaticine in many cutaneous diseases, such as psoriasis, pityriasis versicolor, scrofuloderma and lupus erythematodes.

To Auspitz of Vienna belongs the credit of the introduction of this remedy and the indications for its uses. Traumaticine is a solution of one part of gutta-percha in ten parts of chloroform. It is a syrupy liquid, smells strongly of chloroform, and has a color and a consistence according to the quality of gutta-percha used; of this there are three qualities. The *brown* is that which is most abundantly found in commerce. It dissolves with greater difficulty. It dries more slowly, but preserves its elasticity longer. The *red* is that used by dentists.

It dissolves more readily in the proportion of 10 % and also of 20 % : it forms a liquid of a rosy color, and it is to be preferred where it is to be applied to exposed parts of the body, as the face, hands, etc. The *white* dissolves quickly in chloroform in the proportions of 10 and 20 %.

These solutions when applied to the skin easily penetrate in every fold and irregularity, and thereon dry with moderate rapidity. They form a thin adherent pellicle, white, rosy or brown according to the quality of the gutta-percha. The traumaticine folds and bends according to the movements of the skin, without breaking or detaching itself, and without causing any pain, compression or excessive stretching. Numerous remedies can be suspended in it according to their indications, as crysarobin at 10 % or more, as also sulphur, iodoform, salicylic acid, boric and pyrogallic acid and other substances.

For the first time it has been used by him in the treatment of acute blennorrhagic epididymitis, applied in layers externally. Before applying it, the scrotum is to be shaved, and ice is to be applied to it for half an hour so as contract it and reduce its size. By this method the swelling has rest, protection and compression, and rapidly disappears.

Costa praises the applications of traumaticine as the best remedy in these disorders.

A, LAGORIO.

Chiavari, Italy, 27th May, 1885.

ECBOLIC ACTION OF PILOCARPIN.

The important action of pilocarpin in the production of premature labour has already been recognized by some writers, and a few cases have been placed on record. Dr E. Quinta-

valle has recently had an opportunity to test this action, and obtain a most satisfactory result. The case, presenting many points of interest, has been published in the March number of *Il Morgagni*.

The patient was 23 years old, married two years and a primipara. When a girl she had suffered with acute articular rheumatism; menstruated in the 15th year; and had an abortion three months after marriage. Since the commencement of her last pregnancy she has suffered constantly from great dyspnœa. She never consulted any physician, till now, when being in the 7th month of her pregnancy, and her sufferings becoming greater, she decided to do so. Dr. Quintavalle found her in sitting posture in bed, any other position being impossible for her, presenting marked dyspnœa and tumultuous pulsations of the heart. No physical examinations could be made by percussion nor with a stethoscope, for the patient could not bear the slightest pressure on the thoracic walls. Her face was swollen of a dark-red color; the lower limbs and hands were cedematous; the belly was slightly larger than the usual proportions observed in the 7th month of pregnancy. Fatigued by the frequency and shortness of breath, the voice did not rise above a low whisper; she urinated very little, and none of the urine being present, the doctor could not examine it. Unable to make any accurate examination, Quintavalle, taking in account the past history of the patient, made a diagnosis of an acute stenosis of the left auriculo-ventricular orifice, due to an endocarditis developed during the pregnancy, and recognized in the marked pulmonary stasis the actual fact most dangerous to the life of the patient. To treat the stasis he bled the patient, which produced a slight improvement. He administered digitalis for the heart-trouble, and did not omit cutaneous derivatives. He called again to see her three weeks

after, in company with another practitioner, and found the patient much worse. He thought it prudent not to use the same therapeutic means as before, but decided to proceed to induce premature labour. Nothing else remained to be done but to select the most suitable method. The condition of the patient did not permit the use of the ordinary means. Remembering the good effects of pilocarpin, both agreed to try its value. Six centigrams (1 grain) were prescribed dissolved in three grains of water, and a third part was immediately injected hypodermically into the internal part of the left thigh. After eight or ten minutes the physiological action of jaborandi was observed: mydriasis, profuse salivation and perspiration with nausea. A digital examination made after 15 minutes showed no change in the uterine neck. The general phenomena being now almost dissipated, another injection of 2 centigrams was made in the right thigh. The same physiological action of the remedy reappeared, together with a relative euphoria in the conditions of the patient. At the same time she began to notice some sensations which showed a beginning of uterine contractions. After waiting twenty minutes and these not increasing, two centigrams more of the alkaloid were injected: the same result followed its use, attended by a greater freedom of respiration and a notable diminution in the symptoms of stasis. The womb now began to act. The patient was left under the care of a midwife and was safely delivered, after 30 hours from the first injection of pilocarpin, of a vigorous, sound and living child.

Having ascertained this effect of muriate of pilocarpin in the induction of premature labour, it remains to be proven in what way jaborandi can produce this result. There is a physiological reason which permits us to give an explanation, plausible at least, of the ecboic action of pilocarpin. It is known that where pilocarpin is introduced into

the system hypodermically, it immediately produces a diminished pressure of the arterial system: this can be recognized by looking at the profuse salivation and perspiration, which phenomena are really the expression of a sudden nervous disorder, which exactly agrees with the fact of a temporary anæmia of the centers of innervation. This anæmia of the nervous centers produces different forms of neuroses, which we observe daily. These neuroses are centric or periphereral, circumscribed or diffused, according to the seat of the anæmia and according to its completeness.

Then we can see how pilocarpin can produce premature labour by diminishing the arterial pressure, producing therefore an anæmia of the center innervation of the uterus, and causing a sudden neurosis of this organ, greatly predisposed to it by its state of gestation.

Quintavalle recommends the use of hypodermic injections of pilocarpin to induce premature labour, for it improves the chances of both mother and child; and we know the dangers of the ordinary processes, and the great repugnance to their application.

A. LAGORIO.

STATE BOARD OF HEALTH.

TRANSACTIONS OF THE ILLINOIS STATE BOARD OF HEALTH.

At the regular quarterly meeting of the Illinois State Board of Health, held in the city of Chicago, April 16th and 17th, the Secretary in his usual report stated that fewer certificates entitling to practice in the State have been issued to physicians during the past quarter than during any corresponding period in the history of the Board: To graduates, upon diplomas from medical colleges in good standing, 116, and to 2 others upon examination in branches omitted by their respective colleges; also 2 to non-graduates upon proof of over seventeen years' practice in the State. There were 22 applications for certificates rejected through failure to comply with the requirements of the Board—which is also less than the usual proportion of such cases.

MEDICAL EDUCATION.

As it is during this quarter that the new graduates in medicine begin to appear, their applications have been watched with more than usual interest at this time, as affording some clue to the effect of the new schedule of requirements.

Although 78 medical colleges out of the 116 in the United States, claim to have exacted, at their last session, a preliminary-education requirement as a condition of matriculation, the evidence afforded by the applications thus far received goes to show that in too many cases the standard of such education must be very low.

From the graduates of one college, which announces that a preliminary examination will be held in accordance with the rules of the State Boards, five out of the seven applications received contain such intrinsic proof of defective preliminary education, that they were presented to the Board.

[The following is a verbatim copy of a typical specimen of the applications submitted :

I send to you my Diploma for your approval the degrees Doctor of Medicine was conferred upon me at the ----- annual Commencement of the ----- held on Teusday Mar the ---- 1885. you will pleas return as soon as possiabl and oblige. Enclosed you will find the fee for Registration.

Yours truly

P S if the fee is not suficient I will forward the balance if you notify me by card I understood the fee was one Dollar.

I presume the enclosed Papers will be all that will be requierd. return Diploma to Me at ----- Illinois ----- co.

In another case the first letter, dated March 9, contained a request for a blank affidavit, which was, of course, immediately forwarded. The signature to the affidavit, received March 14, was so evidently not by the writer of the first letter—which was unexceptionable in every respect—that some delay occurred, pending inquiry. Under date of March 30, the applicant, in a handwriting differing both from that of the letter of March 9 and from the signature to the affidavit, writes :

I send you my Deploma today by Expr. and letters of recommendation. I sent fee and affidavit Bout three weeks since. I would like to know at once whether or not to expect a Certificate. you will please return Deploma by Exp.

It is possible that this young gentleman—who, by the way, states that his school of practice is “Alapathy”—passed his entrance-examination as he conducts his correspondence—that is, by proxy.]

There is other evidence—some in the form of direct charges by rival schools, some by the students themselves—that the entrance-examination is, in many cases, a mere form. Colleges

which, on inquiry, claim to exact proof of general preliminary fitness and capacity for the study of medicine, evade the spirit and intent of the requirement in a variety of ways. In some instances it is announced that the examination is confined to applicants who intend to practice in the States in which such examination is made a test of the good standing of a college. In other cases the requirement is entirely omitted from the college announcement, but graduates intending to practice in the States just described are furnished special certificates, setting forth that they have undergone the preliminary examination demanded. Still another form of evasion consists in announcing that a preliminary examination is exacted, but coupling this announcement with a long list of equivalents which will be accepted in lieu of such examination, beginning with the diploma of graduation from a good literary and scientific college or high school, or a first-grade teacher's certificate (the only substitutes which the Board accepts), and ending with a "special arrangement" whereby the certificate of a preceptor is accepted as sufficient evidence.

It is not to be inferred, however, that there has been no gain or improvement in the standard and methods of medical education since this schedule of minimum requirements was first published. On the contrary, probably all has been accomplished that could have been reasonably expected. But these illustrations will indicate the scope and methods of the antagonism aroused by a measure for improvement, the first effect of which results in diminished classes and loss of income—an antagonism natural enough, perhaps, in view of the largely commercial character of many institutions of medical education. They also serve to show the necessity for further earnest and continuous effort.

In this direction it is suggested that one of the tests of the

good standing of a medical college, for the purposes of the Medical-Practice Act in this State, should be its honest and unequivocal statement, in annual announcement and elsewhere, of the requirements for admission to its lecture-classes, and an honorable and impartial enforcement of such requirements.

To secure the recognition of its diplomas in this State—as in good standing—every college should distinctly announce that the conditions of admission to its classes are: 1. Credible certificates of good moral character. 2. Evidence of the possession of a good English education, including mathematics, English composition and elementary physics, or natural philosophy—such evidence to be furnished, in the absence of a diploma or certificate of graduation from a good literary and scientific college or high school or a first-grade teacher's certificate, by a thorough examination in the branches of such education. While this is the minimum, as to preliminary education, which should be distinctly specified and impartially exacted, it does not preclude colleges, from making other requirements as conditions of admission to their lecture classes.

The Secretary also suggests that the affidavit now required by law as to the lawful possession of a diploma, may be properly modified so as to include the information necessary to aid the Board in deciding whether such diploma was issued by a legally-chartered medical institution in good standing, as the third section of the Medical Practice-Act requires it to be—such modification to consist, substantially, in striking out the words “said institution,” with which the declaration ends in the affidavit now in use, and substituting therefor the words *a legally-chartered medical institution in good standing, as defined by the Illinois State Board of Health, in its Schedule of Requirements printed on the back hereof.* A foot-note on the face of the affidavit should call the especial attention of the affiant to the import of this declaration.

The law specifically requires that applicants for certificates shall furnish this proof—proof not merely that their diplomas are from legally-chartered medical institutions, but that they are from such institutions “in good standing.” Obviously the graduate of a given institution is a competent, if not the best, witness as to the qualifications, exacted of him before he received its diploma. And since these qualifications go to the essence of the question as to the standing of the institution, it is submitted that the Board should avail itself of this form of proof.

Acting upon these suggestions the Board subsequently during the meeting adopted the following resolution :

CONCERNING MEDICAL EDUCATION.

WHEREAS, Many medical colleges do publicly announce that an entrance examination of candidates for admission to their lecture courses will be exacted, and do honestly and impartially enforce such examination; while, on the other hand, a number of schools either avoid making such announcement, or evade the practical enforcement of any requirement of general education preliminary to the study of medicine; and

WHEREAS, These conflicting practices result in lowering the standard of medical education by attracting to a certain class of schools students who are poorly prepared for the study of medicine; therefore be it

Resolved, That, in order to secure the recognition of its diplomas as in good standing for the purposes of the Medical Practice Act in this State, it is necessary that each college shall distinctly state in its annual announcement that the conditions of admission to its classes are: 1. Credible certificates of good moral character. 2. Diploma of graduation from a good literary and scientific college or high school, or a first-grade teacher's certificate. Or, lacking this, a thorough examination in the branches of a good English education, including mathematics, English composition, and elementary physics or natural philosophy.

Resolved, That the Secretary of the Board be, and hereby is, instructed to furnish a copy, of the foregoing preamble and resolutions to the Dean or Secretary of every medical college, and to the editors of medical journals, in the United States.

On motion of Dr. Mackenzie it was also

Resolved, That, since the publication of the names and addresses of matriculates is desirable for purposes of information, the Secretary be authorized to request of all colleges desirous of being accounted in good standing in this State, that they publish in their successive annual announcements

complete lists of the matriculates, as well as of the graduates, of each immediately preceding session.

THE CHOLERA.

In connection with the efforts made to secure information from the National authorities concerning the status of cholera abroad, attention is called in the report in the cable dispatches received by the newspapers during the meeting announcing that the French, Italian and Portuguese governments had ordered a quarantine of detention against Spanish vessels; and the appearance of the disease at Jaen, in the province of that name, in the south of Spain, and at Santiago de Compostela, in the extreme northeastern province of Coruna—the same dispatch saying that the panic in Spain over the spread of cholera is increasing as reports continue to arrive showing that new points are being constantly attacked; that the government is taking energetic measures to isolate infected towns; and that a circular of warning has been sent by telegraph to the authorities of all the provinces cautioning them against the admission of persons or goods from twelve specified towns, all of which are officially stated to be more or less infected.

Simultaneously with this latter information the first official statement was made public by the Secretary of State, who announced on the 18th of April, the receipt of a dispatch from the United States consul-general at Madrid, saying "that he is informed by the director-general of health that there is no cholera in Spain, and that the cases recently reported in the province of Valencia are not cholera." The Spanish government has instructed its ambassadors to protest against quarantine restrictions, and a dispatch of the 19th inst., from Barcelona also asserts that the disease is not Asiatic Cholera, but cholera morbus or cholerine due to local causes, the outbreak at Alcira, near Valencia, for example, being caused, it is claimed, by the failure of the regular water supply, in consequence of

which "the people have been drinking from a canal which was tainted by paper mills that use suspicious rags."

In view of these contradictory statements, and in the absence of full and authentic information from the National health authorities, sanitarians are justified in regarding, for precautionary purposes, the disease now so widely spread through the littoral provinces of Spain as true Asiatic Cholera, and in apprehending present danger of its introduction into this country through commercial intercourse with the Spanish possessions in the West Indies—Cuba, Porto Rico, etc.—and less directly with those in South America.

Attention is also called to the fact that the country is threatened with an influx, by immigration from Italy, of a people reduced to the verge of beggary and starvation by last year's cholera epidemic and its results. The low rates of passage will tempt to violation of the law against overcrowding, with all the suffering and unsanitary conditions which will thence result. The poverty of the people and their modes and habits of life will add to the evil; and increased burdens and responsibilities will be thrown upon the authorities of every port at which these immigrants land, as well as upon the communities in which they may settle. These considerations may make it necessary to begin the work of sanitary supervision of travel and quarantine along the State boundary lines earlier than would otherwise be necessary. Already the first instalment of the Italian immigration has arrived in Chicago.

The Board adopted the following preamble and resolutions concerning these matters:

CONCERNING INFORMATION OF FOREIGN EPIDEMIC DISEASES.

WHEREAS, Prompt, full and trustworthy information of the existence of epidemic diseases, such as Asiatic cholera, yellow fever and small-pox, in the foreign ports in commercial relations with this country, is a matter of the first importance to the success of efforts for preventing their introduction or limiting their spread; and

WHEREAS, It is understood that, under the authority conferred upon the President by Sec. 1752 of the Revised Statutes of the United States, consular officers and other foreign agents of the General Government are required to furnish such information : Therefore, be it

Resolved, That the Secretary of this Board be, and he hereby is, instructed to respectfully request of the honorable the Secretary of State that he cause to be transmitted to the office of this Board, at Springfield, so much of such information as may be useful in guiding action for the protection of the people of this Commonwealth against Asiatic cholera, yellow fever and small-pox.

On motion of Dr. Clark it was also

Resolved, That the State Board of Health of the State of Illinois respectfully but earnestly requests the President of the United States to authorize the National Board of Health to use so much of the contingent epidemic fund, appropriated by the last Congress, as may be necessary for preparing and enforcing an adequate system of preventive measures against the introduction and spread of foreign pestilential diseases in co-operation with, and in aid of, State and local health organizations and with especial reference to Asiatic cholera.

Resolved, That the Secretary be authorized to transmit a copy of this resolution to the President.

STATE SANITARY SURVEY.

As already stated, the first distribution of the blank inspection returns and accompanying instructions, embracing an aggregate of about 270,000 houses, was completed during the last week of the quarter. This distribution began with Alexander county and progressed northward to the tier of counties along the Wisconsin line, which was reached in ample time to prepare for work as soon as the weather would permit. Before the middle of the State was reached, responses began to be received from localities in the southern counties, and by the close of the quarter 143 towns had been heard from. General publicity has been given to this effort by the press of the State, to secure which special circulars were addressed to the editors of 775 different publications.

A blank form for a tabular statement of these inspections has been prepared and printed, and is now ready for distribution. These will be furnished in duplicate sets, one to be

returned to the office of the Board. They will show, at a glance, the actual sanitary condition of any given house and premises at the date of inspection; and, in the event of Asiatic cholera, or other epidemic contagious disease, making its appearance in a locality, they cannot fail to be of great practical value, not alone to the authorities of such locality, but also to the Board, in indicating, without loss of time, the direction and manner in which its coöperation, advice or authority may be best employed.

Circular-letters have been addressed to the managers of all railroad companies operating in this State, urging immediate attention to the condition of the water-supply and of privies and water-closets at stations, shops, roundhouses and other places along their respective roads. Satisfactory replies have been received from nearly every company addressed, and some of the most important have already practically completed the required work.

County boards and officers in charge of public institutions—alms-houses, jails, asylums, etc.—have also been requested to secure a thorough sanitary policing of such places, and specific instructions on the most important points have been furnished.

Copies of the blanks, forms, etc., prepared for this general work, have been furnished, on request, to the health department of Chicago; and an excellent form of inspection return, modified to meet the city conditions, has been prepared by the Commissioner of Health, Dr. DeWolf, for an inspection of some 70,000 houses. It is proposed to complete the inspection of 50,000 of these, and to secure the correction of the defects thus disclosed, by the 1st of June.

One of the encouraging indications of the interest taken in this effort to prepare the State against an epidemic is found in the large number of letters from private individuals asking advice, making suggestions, or expressing approval.

SANITARY CONDITION OF CHICAGO.

During the Friday morning session, Dr. O. C. DeWolf, Health Commissioner of Chicago, was present by invitation to speak upon the sanitary condition of the city, the work in progress and projected, and the preparations for cholera. From the standpoint of the sanitarian, Dr. DeWolf said, Chicago was a clean city, although its muddy streets made it seem dirty. Its low death-rate and the failure of small-pox to spread, notwithstanding 35 introductions of the contagion since last June, showed it to be clean in a sanitary sense; and the work now in progress and projected would, he believed, make it clean in appearance as well as in fact. Referring to the house-to-house inspection in the State at large, he said that the health department was also inspecting at the present time about a thousand houses a week in the worst quarters of the city; in a short time this would be increased, so that by the middle of June he hoped to have all that really required supervision thoroughly inspected and put in good condition. Some 9,000 tenement houses, which are usually a serious sanitary evil in all large cities, are under constant supervision, and he believed them to be as unobjectionable as it was practicable to make such buildings. If cholera should come, the preparations were already completed to promptly take charge of the first cases, to furnish medical attendance and nurses, to depopulate an infected house or locality, and to carry out whatever measures were necessary to prevent any spread.

The thanks of the Board were tendered Dr. DeWolf by the President, for his very interesting and reassuring statement.

At the afternoon session Mr. O. C. Guthrie, of Chicago, presented, by invitation, a brief outline of his plans for the sewerage and drainage of Chicago and its suburbs. Their important features embrace a study of the hydraulics of the

Desplaines river, with reference to the effect of high water upon the cleansing of the Chicago river through the canal (by counteracting the action of the pumps), upon the integrity of the canal itself, and upon the safety of Chicago and Joliet from inundation.

DISINFECTION AND DISINFECTANTS.

The Secretary asked leave to submit a copy of the Preliminary Report on Disinfection and Disinfectants made by the Committee on that subject appointed by the American Public Health Association, stating that, as Secretary of the Sanitary Council of the Mississippi Valley and chairman of its special committee on General Sanitation, he had, in accordance with a resolution of the council, addressed a letter, March 14th, to Surgeon George M. Sternberg, U. S. A., chairman of the Committee on Disinfectants, requesting to be furnished with "a plain, practical paper on disinfection and disinfectants for popular use and distribution." Surgeon Sternberg, under date of April 14th, in a letter, accompanying this copy, writes: "At a special meeting of the Committee on Disinfectants, called for the purpose, the paper submitted was carefully considered and adopted unanimously as expressing the views of this committee with reference to the best methods of disinfection known to us."

As this paper was intended for popular use and distribution the Secretary remarked that he knew of no better way of securing that end than by publishing it in the report of the proceedings of the Board.

Dr. Ludlam moved that the copy of the Preliminary Report be received and published as suggested. Carried. It was subsequently ordered that the Secretary prepare a special edition of the paper, embracing only the practical instructions, for the use of local boards of health and health officers throughout the State.

During the sessions the following action was taken upon cases arising under the

MEDICAL-PRACTICE ACT.

Dr. Charles McLean, of No. 182 West Madison street, corner of Halsted, Chicago, charged with unprofessional and dishonorable conduct in (1) Fraudulently issuing a card in the following terms :

Dr. McLean's Medical Institute for Female Diseases, 182 West Madison street, Room 11. Phrenology and Mesmerism Successfully Taught. Terms reasonable. President—Charles McLean, M. D., assisted by Prof. L. H. Anderson and others. Dr. McLean's New Developer for Delicate Ladies never fails to Strengthen the Chest, Develop the Bust, and Beautify the Complexion.

(2) Attempting to blackmail a female patient, attracted by the foregoing card, and whose testimony before a Chicago police justice, submitted to the Board, established the fact of grossly indecent solicitation and practice on the part of said McLean. (3) Obtaining money under false pretences, for which he was arrested, confined in jail, and released on refunding the money. (4) Grossly immoral conduct and general reputation in the building where his so-called "Institute" was located.

In a pamphlet styled "The Mind Cure," dated October, 1884, appeared the following :

"We duly appreciate an interesting call and visit by Charles McLean, M.D., LL.D. The doctor is widely known in Europe and America. Is a graduate of Glasgow University, Scotland, in the O. S. ; also a graduate of one of the Chicago medical colleges, N. S. Has been a student of law and theology, and in the latter received D. D., but chooses not to use it, having retired from this field after two journeys around the world. He is an author of some repute, and speaks several languages. He is now a resident of Chicago. Full of energy, has gained wealth and prominent standing among druggists here and across the water. We find him cultured and progressive. He had learned of our new association and purpose and spoke so highly of the Mind Cure system we told him our door was open if he could identify with it. He is now a member of our association and a contributor to its finances. Also to be an editorial contributor to our columns. Such steps are portentous. Let them come. The doctor now is president of a Medical Institute at 182 West Madison street and will be heard from."

Dr. McLean had been duly notified to appear in answer to the foregoing charges, but it was stated by one of the sworn witnesses that he had disappeared after being released from jail. After a full consideration of the evidence presented, it was ordered that certificate No. 5853, issued to Dr. Charles McLean on the 13th of March, 1883, be revoked.

Dr. James F. Cook, of the "St. Jacob Institute," No. 14 South Clark street, Chicago, charged with unprofessional and dishonorable conduct in (1) Being associated with a fraudulent medical "institute," so-called, of which he advertises himself to be the "superintendent. (2) Falsely testifying as to the physical condition of one Smith Whittier, for the purpose of mitigating the sentence of said Whittier, convicted in the United States District Court of sending obscene matter through the mails. (3) Writing, publishing and distributing an obscene pamphlet entitled "Hidden Secrets."

Dr. Cook had been duly notified to appear in answer to the foregoing charges, and after full consideration of the evidence submitted, it was ordered that Certificate No. 527, issued to Dr. James F. Cook on the 2nd of January, 1878, be revoked.

Dr. J. Alonzo Greene, formerly of St. Louis, Mo., now at 34 Temple Place, Boston, Mass., charged with unprofessional and dishonorable conduct in (1) Falsely and fraudulently claiming to have established "a system of curing all forms of chronic or lingering diseases." (2) Falsely and fraudulently advertising that the Illinois State Board of Health, among other Boards, Colleges and Medical Societies, had awarded him and his associates "diplomas for their remarkable skill in curing disease, and their discoveries of valuable remedies." The evidence being deemed conclusive as to the truth of the charges, it was, after due consideration,

Ordered, That Certificate No. 4811, issued to Dr. J. Alonzo Greene on the 17th of December, 1880, be revoked.

Dr. Joseph Atherton, of East Paw Paw, DeKalb county, whose certificate was revoked October 5, 1882, and who had asked an opportunity to present reasons for its restoration, stated that he acknowledged the sufficiency of the grounds upon which his certificate had been revoked, but claimed that he had been misled, and upon discovering his mistake and its consequences had abandoned the objectionable practices. He asked the Board to restore his certificate, pledging himself to act in conformity with the requirements of the Medical-Practice Act as to honorable professional conduct, and sustained his application by strong commendatory letters from physicians and others. On motion of the Secretary, Dr. Atherton's certificate was ordered to be restored.

On motion of Dr. Mackenzie, all other cases under the Medical-Practice Act, not otherwise disposed of, were continued to

a special meeting to be called by the Secretary at an early date.

At 9 o'clock P. M., Friday, the annual examination of candidates was concluded. The Secretary announced that two of the class of nine had withdrawn without attempting to pass the preliminary examination upon general education. Of the remainder, the following gentlemen attained the required percentage entitling them to pass:

ADOLPH C. BRENDKE, Chicago.

JONATHAN E. CLARK, Mason, Effingham county.

JAMES D. CRAIG, M. D., Rogers' Park, Cook county.

The following is the schedule of questions submitted at this examination, and to which eighty per cent. of correct answers was required in order to pass.

ILLINOIS STATE BOARD OF HEALTH.

Quarterly Meeting, Chicago, April 16-17, 1885.

EXAMINATION IN ANATOMY.

BY W. HASKELL, M. D.

1. Describe the frontal, sphenoidal and maxillary sinuses. Which ones exist in infancy?
2. Give the anatomy of the shoulder joint.
3. Describe a rib.
4. Describe the muscles concerned in pronation and supination of the fore-arm.
5. Name the branches of the external carotid artery.
6. Describe the circulation of the liver.
7. Describe the brachial plexus, giving the nerves of which it is formed, its location and its branches.
8. Name the arteries, veins and nerves cut in an amputation of the leg in its middle, and give their relations.
9. Give the anatomy of the eye.
10. Give the anatomy of the prostate gland.

EXAMINATION IN PHYSIOLOGY.

BY W. R. MACKENZIE, M. D.

1. Describe the physical properties of the blood.
2. Its chemical composition.
3. Its structural character.
4. Its pulmonic and its systemic circulations.
5. Its circulation in the fetal heart.
6. Describe the function of respiration.
7. What are the sources of carbonic acid in the body?
8. State the normal relation of the respiratory act to the heart-beat.
9. Describe digestion.
10. What is the function of the liver in the process of nutrition?
11. Give the composition and properties of chyle.
12. What is bile—its source and function?
13. What is secretion, and name the more important secretions of the body.
14. What is the specific gravity of normal urine?—its reaction.
15. What is the normal temperature of the human body, and what the minimum and maximum temperatures consistent with life?
16. What are the general functions of the great sympathetic or tri-splanchnic nerve?
17. What is sensation, and what are its various kinds or modes?
18. Mention the nerves concerned in the special sense of taste, and their respective offices.
19. Describe the physiology of sleep.
20. What is meant by somatic death, and to what is it due?

EXAMINATION IN CHEMISTRY.

BY A. L. CLARK, M. D.

1. What are the general properties of acids?
2. What is a salt?
3. Give the chemical symbols for tin, lead, potassium, sodium, iron, gold, silver, sulphur.
4. What is catalysis?—synthesis?
5. What is a quantitative analysis?
6. In what way would you test water for organic impurities?
7. To what chemical element in nitro-glycerine is due the explosive nature of that substance?
8. How are the gases forming air united?
9. Give the general properties of chlorine.
10. What is tetrad?
11. What is meant by the diffusion of gases?
12. Will the air at the top or bottom of a room contain the more carbonic acid gas, and why?
13. What fluid is the most universal solvent?
14. What is meant by the terms osmosis and exosmosis?
15. What are incompatibles? Give one or more illustrations.

EXAMINATION IN PATHOLOGY.

BY R. LUDLAM, M. D.

1. Define pathology as distinguished from physiology.
2. What is the difference between fever and inflammation ?
3. Give the chief and common characteristics of the malignant diseases.
4. Define the difference between a general and a local disease, and give illustrations of each.
5. Explain the abdominal tympanitis of typhoid fever.
6. Describe the pathology of aphthous ulceration.
7. What is emphysema, and what is its most frequent cause ?
8. Give the pathological location of inflammation.
9. Which lung is most frequently inflamed, and why ?
10. Why does pelvic congestion frequently alternate with portal congestion ?

EXAMINATION IN MATERIA MEDICA AND THERAPEUTICS.

BY GEO. N. KREIDER, M. D.

1. Give the habitat, preparations, and therapeutic uses of erythroxy-lon coca.
2. What salt derived from it has been recently found valuable in therapeutics ? Give its uses.
3. Describe the methods of producing two kinds of electricity.
4. Define the therapeutic indications of each.
5. Give the therapeutic uses and applications of cold.
6. Of heat.
7. What is your treatment of chronic constipation, and advice ? Give your prescriptions.
8. Write a prescription for the first stage of cholera.
9. Give the composition and doses of five officinal preparations of opium.
10. How would you administer quinine other than by the mouth ? Give two ways.
11. What general anæsthetic do you prefer ? Describe your method of using it to produce anæsthesia, giving the precautions you would take.
12. Give the adult doses of cod-liver oil; chloral; oil of turpentine; asafoetida; salicylic acid; tincture of aconite; tincture of digitalis; solution of arsenite of potassium.
13. Give the official name and composition of Dover's powder; Fowler's solution; mercury and chalk; seidlitz powder; blue ointment; compound rhubarb powder.
14. What doses of compound tincture of opium would you give to children one, three and four years old, respectively ? How much opium would each receive ? How do you compute the dosage for children ?
15. For poisoning by what drug would you give freshly prepared hydrated sesquioxide of iron ? How you prepare it ?

EXAMINATION IN HYGIENE.

BY JOHN H. RAUCH, M. D.

1. Name the principal preventable diseases in the order of their greatest fatality.
2. Give the differential diagnosis of small-pox—of scarlet fever—of measles—of chicken-pox.
3. What diseases are spread mainly through the medium of water—what mainly through the air—and what mainly by direct contact?
4. At what period of life is the death-rate the highest, and what are the principal preventable causes of such mortality?
5. Describe the operation of vaccination—its phenomena—complications—the relative merits and demerits of bovine and humanized virus—and state the ages at, or conditions under, which the operation should be repeated.
6. What precautionary measures would you, if a medical officer of health, enforce in a community threatened with Asiatic cholera?
7. What measures would you advise on the appearance of a first case of Asiatic cholera in your community?
8. What are the most common sources of pollution of a water-supply in large cities, and what in small towns, villages, and in the country?
9. What is the distinguishing characteristic of sewer-contaminated water?
10. What effect does boiling have upon a contaminated or impure water?
11. Mention the desirable sanitary conditions of a site for a dwelling—character of soil—drainage—exposure—elevation.
12. What are the pathological indications of defective sewerage and drainage of a house and premises?
13. What are the physical indications of the same condition?
14. What is ground air, and how may it be deleterious to health?
15. Within what distance of a well, or other source of water-supply, is a privy-vault dangerous in a sandy soil—in a loam—in clay?
16. What effect would general subsoil drainage produce upon the temperature, atmospheric humidity and wind movement of this State?
17. Formulate, briefly, a set of rules for school hygiene.
18. Mention four of the best disinfectants—state their applications—and give directions for their use.
19. Define the difference between an antiseptic and a germicide.
20. What diseases of animals are communicable to the human family?

EXAMINATION IN MEDICAL JURISPRUDENCE.

BY JOHN H. RAUCH, M. D.

1. Define medical jurisprudence, and state what degree of knowledge the law expects of a medical witness?
2. What is the duty of a medical witness as to questions of fact?
3. What is his privilege as to questions of expert knowledge or opinion?

4. What are the important points to observe, with reference to the subject, in conducting a post mortem for legal purposes ?

5. Describe the signs which would enable you to determine whether an incised wound had been inflicted before or after death ?

6. What portions of the body would you select for a chemical examination in a case of suspected poisoning ?

7. What are the indications of viability in the fœtus, and at what age are these found ?

8. In suspected infanticide, what proof would determine respiration ?

9. Describe the course of procedure in commitment to an insane asylum in this State.

10. What important legal bearing has the collection of vital statistics ?

BOOK REVIEWS.

MODERN THERAPEUTICS OF THE DISEASES OF CHILDREN,
WITH OBSERVATIONS ON THE HYGEINE OF INFANCY. *By*
JOSEPH F. EDWARDS, M. D., ETC., ETC. *Philadelphia*: D. G.
BRINTON. 8vo. 346 pp.

This excellent compendium of the therapeusis of childhood is issued by the same publisher and with a similar arrangement to that of his "Therapeutics of Gynecology and Obstetrics," which is that of an alphabetical list of diseases with the various treatment suggested for each. In addition to this, there is a check-list of drugs under each head, also alphabetically arranged and starred according to Waring's original plan. Whether these stars have always been affixed to the most reliable remedies for the disease treated, often admits of discussion, as in the case of quinine for true croup and carbolic acid in pertussis ; but surely he must be a captious practitioner who cannot find something appropriate in the generous list of drugs suggested. As is always the case, the more uncertain the disease, the more bewildering the number o

remedies proposed. For instance, under the head of diphtheria we find more than fifty remedies and the wildest contradictions in regard to treatment. Drysdale informs the reader that chlorate of potash is the most valuable of all remedies in diphtheritis, if given without timidity, while Herroch and others, especially warn us against large doses of the same. Calomel, he says, on page 150, is almost discarded in treatment, and on pages 153, 165 and 180, he recommends strongly its use, in one case in large doses. *Quot medici, tot sententiae* regarding diphtheria, even to German nihilism, which asserts all remedies except sulphur "are entirely useless in severe cases, and these alone should be condemned since the mild cases recover spontaneously," (p. 153). In a book of this character such a statement ought, at least, to be offset by the teachings of Professors Pepper and Jacobi on this subject, but we look in vain for them. In fact, the most serious objections that can be brought against the work is the relatively small importance given some of our best American authorities in pædiatrics. Why, for instance, should Herroch, of Berlin, be quoted forty times and Drs. Jacobi, Plant and Holt given only a single reference, and Armand Semple, of London, thrice the prominence of J. Lewis Smith, of New York? It certainly awakens a suspicion that the preface, to the contrary notwithstanding, the book has been scissored from only a limited number of authorities and a restricted file of medical journals. Nevertheless, the book has many new and valuable points for one interested in the therapeutics of childhood. The subject of the hygiene and general treatment of infancy contains much that can be found elsewhere in no other single work, though the addition of Young's posology and Ellis' division of drugs would have enhanced its value. The list of diseases contains several that are rarely met with in this country, but unfortu-

nately, omits all treatment of such common troubles of children as adenitis, œsophagitis, ring-worm, constipation and all affections of the eyes, ears, or heart.

The type and paper of the book are good, and it is remarkably free from the typographical errors so usual in such collections of prescriptions. It is also provided with good indices of diseases, remedies and authors referred to. Among the latter we note four of our Chicago physicians, and from internal evidence furnished by the prescription on page 292, conclude that the Dr. Davis, of New York, there quoted really resides in Chicago.

M. P. H.

HAND-BOOK OF DISEASES OF THE SKIN. *Edited by* H. V. ZIEMSEN, M. D., *Professor of Clinical Medicine in Munich, Editor of Ziemssen's Cyclopædia of the Practice of Medicine. Contributors:* Prof. H. AUSPITZ, M. D., *Vienna*; V. BABES, M. D., *Budapest*; Prof. E. GEBER, M. D., *Klausenburg*; E. LESSER, M. D., *Leipzig*; P. MICHELSON, M. D., *Königsberg*; Prof. A. NEISSER, M. D., *Breslau*; Prof. E. SCHWIMMER, M. D., *Budapest*; P. G. UNNA, M. D., *Hamburg*; E. VEIEL, M. D., *and* TH. VEIEL, M. D., *Cannstatt*; A. WEYL, M. D., *Berlin*; *and* Prof. H. V. ZIEMSEN, M. D., *Munich. Illustrated with eighty wood engravings and color prints. New York: WM. WOOD & COMPANY. 1885. pp. 658.*

Criticism of this elegant volume, the most elaborate which has appeared in the English language since the production of Hebra's famous treatise by the Sydenham Society, is disarmed at the very outset. The American publishers state in their preface that the work is produced for free presentation to subscribers to the Cyclopædia translated by their agents. There is an old proverb relating to gifts, which is as true to-day as when it was first enunciated in the desert of Arabia.

But there is much in the present volume that will endure the severest criticism to which the best of books should be always subjected. The names of the distinguished authors who have co-operated in its production, and their active participation in some of the largest and most valuable attainments of modern pathology, gave to the original work an interest and value that will for many years insure to it the importance which it now possesses in the library of the man who devotes himself to the special study of cutaneous diseases. The translation has been remarkably well made by the American collaborators; and where they have taken the liberty of somewhat abridging the original text, we have found by actual comparison with the other that the work has been effective in the direction of simplicity and value.

It should be remembered, moreover, that the volume is to be read and interpreted in the light of those that have preceded it. Thus, for example, the ingenious chapter on syphilis, by Neisser, is admitted to be a justifiable interpretation of the disease under discussion as one induced by the presence of bacteria,—a theory which has, if we may believe the later investigations of Lustgarten* and others, been confirmed by demonstration since the original text was printed. But the student whose knowledge of the disease was limited to the facts contained in this chapter, would be sadly ignorant of the several clinical pictures presented in course of its fullest evolution. For these, it would be necessary for him to turn to the chapters consecrated to the same subject by Bäumler in the third volume of the *Cyclopædia*.

If one may be permitted to criticise in any degree a work of this character, it should be purely and solely from the

*Die Syphilis-Bacillus von Dr. Sigmund Lustgarten, Assist., etc, mit 4 chromolithographirten Tafeln. Wien, 1885.

American stand-point. After patient labor, it has been at last proven, though long disputed, that the skin diseases of this country differ in the type and in the numerical preponderance of each from those seen elsewhere. For example, there have been noted during the last severe winter, in the northwestern states of this country thousands of cases of *pruritus hiemalis*. Numerically, this disorder has, in the region named, surpassed the skin diseases of all kinds encountered by the general practitioner. Yet the subject is dismissed in the pages of the work before us with a paragraph, Prof. Schwimmer adding that he has known "several persons" to be affected in this way in winter; while a score of pages are devoted to leprosy; and two to rhinoscleroma, no case of the latter having yet been reported by an American author of whom we have knowledge!

The same neglect, or omission, may be observed in relation to numerous contributions made by American authors to dermatological subjects of importance. The operation for permanent removal of hairs by electrolysis, for example, is dismissed with the brief conclusion that one author reports a return of fifty per cent. of such hairs after removal—a statement that on its face bears the very best proof of the value of so simple an operation, which unquestionably after patient repetition in the end accomplishes better than all other devices the result sought for. No mention is made too of Duhring's carefully studied and amply illustrated case of neuroma, reported with full pathological details, not only in his papers on that subject but also in his treatise, and yet the total number of cases of true neuroma of the skin might probably be counted on the fingers of the two hands, while the coarse illustrations of the exceedingly rare disease, given on page 613, are of "cicatricial neuroma" and "amputation neuroma" only.

The treatment of eczema of the face, exclusive of the dis-

ease as it recurs in the eyelids, nostrils, and lips, is here concluded in just five lines. It is simply astonishing to what extent book-makers in general, having a really laudable desire to cover the ground shadowed by their system of diseases, ignore the demands of practice and the urgent necessities of sufferers. Erythematous eczema of the face is, irrespective of any involvement of the nostrils, lids, and lips, one of the most formidable, distressing, persistent, and deforming of all cutaneous disorders. Its characteristics are so clearly marked that it well-nigh stands alone among the protean manifestations of the disease which it represents. A good-sized volume might well be written upon the sole subject of its management and therapy.

Yet several of the small manuals published in this country are more practical and useful guides in the treatment of this affection than the large *Cyclopædia* volume which comes to us heavy with the weight of German authority.

The salve-muslins, and plaster-muslins so frequently named in the volume as suitable topical applications in cutaneous diseases, are scarcely known to the general practitioner in this country, and are for many of the latter quite out of reach. We in this city have imported and employed them to some extent, but their adaptability to many patients affected with cutaneous maladies is more limited than is generally supposed to be the case; while a piece of muslin of suitable size, thickly spread with a freshly prepared salve, is often more efficacious than the imported mulls, even if carefully preserved in air-tight boxes.

Too much praise, cannot, however, be awarded the Messrs. Wood for the indefatigable pains taken in bringing out the present volume. It is a triumph of their enterprise, of their liberality, and of their wise judgment. Had the undertaking seem-

ed formidable at the inception, it became still more so as it progressed. The original estimate of fifteen volumes of from 500 to 700 pages (upon which, by the way, the price per volume for the American work was fixed), increased at an alarming rate. New matter and material accumulated, and the authors could not be confined in their MS. to the original estimate of pages required. Almost at the start two alternatives presented themselves to the American publishers—either to increase the number of volumes, and thereby place the burden of the extra expense upon the subscribers, or to increase the number of pages in each volume, and assume the loss themselves. The publishers, with unprecedented generosity, and without even an announcement to that effect, chose the latter alternative; and so, notwithstanding that the increase amounted to upward of fifty per cent. more matter, they carried the work through to the end, assured that the benefit to their subscribers would be thoroughly appreciated by them.

While we can but believe that the work is better suited to the shelves of the library especially devoted to dermatological literature than to those of the conventional “busy practitioner,” we must acknowledge our great debt to the publishers in issuing this volume, and at the same time heartily congratulate the subscribers to the American translation of V. Ziemssen’s *Cyclopædia* on the fact that they have had presented to them such a valuable and instructive work.

J. N. H.

THE MICRO-CHEMISTRY OF POISONS. *By* THEODORE G. WORMLEY, M. D., PH. D., LL. D. *Philadelphia*: J. B. LIPPINCOTT. *Chicago*: W. T. KEENER, 96 *Washington Street*.

A new edition of a work as well known as Professor Wormley’s *Micro-Chemistry of Poisons* cannot fail to attract a good deal of attention from those interested in that special branch

of chemical investigation. The second edition, which appeared a few months ago, is distinguished from the first, chiefly by the larger amount of matter it contains, and the addition of several new plates. These plates constitute, of course, the characteristic feature of the work, and their history is too well known to need an explanation here. But while being in a certain sense the characteristic, they are far from being the most important part of the book, and it is perhaps not far from the truth to say that without them the manual would possess nearly the same *practical* value, although the term "micro," as used by the author, could no longer be applied to it.

A book of no little interest could be written on the use and abuse of the microscope, and in the present instance, it seems to me, we have an illustration of how far one's enthusiasm may carry him in the choice of means not always best adapted to the end to be attained. The microscope renders us invaluable assistance in many investigations, often deciding the nature of a substance where chemical methods utterly fail; but any one who has had experience in the examination of microscopic crystals must understand the difficulties in the way of obtaining characteristic forms, and how far these difficulties are increased when the material to be tested has first to be separated from complex organic mixtures.

Where chemical and physiological tests fail, there is certainly little use in trying to discriminate with the microscope, and in this connection the words of Woodman and Tidy are worth quoting:—"We consider it, therefore, unnecessary to enter into any descriptive detail, as others have done, of processes for the selection of millionths of a grain by such methods as the collection of microscopic sublimates, which we admit are as exquisitely beautiful as they are, in our opinion, totally unfitted for practical investigation. If such poisons

* * * cannot be detected by their reactions in a test-glass, we are doubtful whether we should ever be justified in giving positive evidence of their presence on a criminal trial, by their microscopic forms and microscopic reactions."— *Forensic Medicine*, p. 84.

I am inclined to think Professor Wormley himself recognizes the truth of this, as the larger part of his book is devoted to the discussion, not of microscopic forms, but of the regular chemical tests, methods of separation and physiological actions of the various poisons. One can speak only in terms of the highest praise of this part of the book, as also of that relating to the selection and discrimination of blood stains. It is interesting to note that Professor Wormley takes a very conservative view of the value of microscopic measurements in determining the nature of the blood corpuscles—a view which doubtless finds favor with all investigators, save those belonging to the ranks of the professional experts. J. H. L.

ON THE TREATMENT OF GONORRHŒA. By J. L. MILTON, Senior Surgeon to St. John's Hospital for Diseases of the Skin, London. Fifth edition, 8vo., cloth, pp. viii., 306. New York: WILLIAM WOOD & Co. 1884. Chicago: W. T. KEENER, 96 Washington Street.

This was the February issue of Wood's Library, and is a thorough exposition of the subject of which it treats. The following from the preface will give a good idea of the different chapters: "The following work contains, in an abridged form, the substance of the earlier editions; the papers on scalding, chordee, and gonorrhœa printed in the *Medical Times*; those on the treatment of gonorrhœa published in the *Medical Circular*, and several papers read before the Medical Society of London, and the North London and Western Medical Societies. The section on the treatment of gleet, on

gonorrhœa in the female, on orchitis, and on gonorrhœal rheumatism, have been revised and amplified. Those on gonorrhœal affections of the heart and pericardium, the peritoneum and pleura, dura mater and sheath of the spinal cord, on gonorrhœal pyæmica, pyelitis, etc., are now added for the first time." Matters pertaining to treatment are discussed at length, and a comparative study of the different therapeutical means is attempted, but the writer's experience seems to have been so vast that he has come to give up any sanguine expectations from remedial agents. The vast amount of quotations and references unfit the book for ordinary practitioners, but render it doubly valuable to a teacher or a specialist.

H. D. V.

CLINICAL STUDIES ON DISEASES OF THE EYE, INCLUDING THOSE OF THE CONJUNCTIVA, CORNEA, SCLEROTIC, IRIS, AND CILIARY BODY. By DR. FERDINAND RITTER VON ARLT, *Professor of Ophthalmology in Vienna*. Translated by LYMAN WARE, M. D., *Surgeon to the Illinois Charitable Eye and Ear Infirmary; Ophthalmic Surgeon to the Presbyterian Hospital and to the Protestant Orphan Asylum, Chicago*. Philadelphia: P. BLAKISTON, SON & CO., 1012 Walnut street. Chicago: W. T. KEENER, 96 Washington street.

This is a most excellent translation of a very admirable work.

Professor Arlt holds an exceptionally high position in the estimation of all students of ophthalmology throughout the world as a clinical lecturer.

He is the author of a very noteworthy treatise on diseases of the eye, published so many years ago (thirty-five), almost at the dawn of the wonderful development of modern ophthalmic science, that it is now almost obsolete, but still a very interesting and instructive book.

The present work, limited to the tissues indicated on the

title page, is an expression of Professor Arlt's remarkably long and extensive experience.

One could wish the author and translator would place in the hands of the American student a complete series of clinical lectures on the remaining tissues of the eye.

The mechanical work of the volume is in harmony with the high character of its scientific and literary merits. E. L. H.

THE OLEATES: AN INVESTIGATION INTO THEIR NATURE AND ACTION. By JOHN V. SHOEMAKER, A. M., M. D., *Lecturer on Dermatology at the Jefferson Medical College, etc., Philadelphia.* F. A. DAVIS, ATT'Y. 1885.

The author of this little book has devoted so much time to a study of the therapeutical effects of the several oleates that he may be said to have succeeded in associating his name with the subject. There can be little question but that several of the oleates, more particularly those of zinc and copper, should enjoy a position in the therapeutics of external treatment second only to that in which the oleates of lead and mercury were placed long before the number of combinations of this sort had reached the present figure. Certainly Attfield and Marshall could not have suspected, when they first wrote in connection with the subject, the extent to which the usefulness of the two oleates named would be eventually acknowledged.

Dr. Shoemaker's little book will prove useful to those who are interested in this subject, for they will find the advertisement of a well-known drug house printed after the conclusion of the pages written by the author, in which oleates manufactured and sold by the former are duly enumerated.

The general style of the author may be illustrated by the following extracts:

"Although this had been disputed by some, who, however,

constitute no medical authority, having a commercial interest only in the sale of their goods, and for pharmaceutical reasons lay more stress on their handsome appearance than on their utility, I think this matter should rest with the physician to decide rather than to the biased vendor." P. 61. (*Sic.*)

Again: "The communications that have appeared from the latter class speak of their action disparagingly, and their effects as problematical, but are devoid of research, which appears when they speak of quinine oleate being limited to inunctions for its systemic impression, showing an absence of practical experience or proper deductions from their results." P. 110.

EXPERIMENTAL PHARMACOLOGY. A HAND-BOOK OF METHODS FOR STUDYING THE PHYSIOLOGICAL ACTIONS OF DRUGS. By L. HERMANN, *Professor of Physiology in the University of Zürich.* Translated, with the author's permission, with Notes and Additions, by ROBERT MEADE SMITH, M.D., *Demonstrator of Physiology in the University of Pennsylvania.* With 32 Illustrations on Wood. 12 mo., cloth, pp. 201. Philadelphia: H. C. LEA'S SON & CO. 1883.

A most valuable little book, especially adapted for students and experimenters, which will lead many on the way to great discoveries in the field of new drugs. Only by such means as are herein employed shall we come to purify our materia medica of all trash, and test successfully the host of homeopathic drugs brought into repute after they were thrown out of the Pharmacopœia.

"The translator has attempted to elucidate the text with a careful selection of illustrations; and he trusts that his voluminous additions, which constitute nearly one-half of the entire volume, will render the work a more perfect guide to the student." (Preface),

These additions are even more practical and valuable than the original, and the American translator deserves much credit.

The make-up of the volume compares well with the other books published by Henry C. Lea's Son & Co. H. D. V.

A TEXT-BOOK OF PRACTICAL MEDICINE. By ALFRED L. LOOMIS, M. D., L. L. D., *Professor of Pathology and Practical Medicine in the Medical Department of the University of the City of New York; Visiting Physician to Bellevue Hospital, etc. With 211 Illustrations.* 8vo., cloth, pp. XV—1102. New York: WILLIAM WOOD & Co. 1884. Chicago: W. T. KEENER, 96 Washington Street.

Although so many valuable books have been lately written on the various specialties of medicine, especially in this country, but few really practical text-books of medicine have appeared. The reason of this is that while a division of labor in the profession has resulted in wonderful progress, very few general practitioners have been able to follow every line of this advancement. However, Dr. Loomis is well abreast of the times and has produced a work which is bound to stand after several antiquated translations of foreign authors have passed into oblivion. The clearness of his style, his thorough discussion of important modes of treatment, and the abundance of illustrations, will do much towards securing for this work a great popularity; and although there are other works on practice fully as good as this, no student or practitioner will regret his purchase when Loomis' Practical Medicine stands within reach on the shelf. H. D. V.

EXPERIMENTAL RESEARCHES ON CICATRIZATION IN BLOOD-VESSELS AFTER LIGATURE. By PROFESSOR N. SENN, M. D., *of Milwaukee, Wisconsin.* Extracted from the *Transactions of the American Surgical Association, vol. I.* 1884.

Professor Senn's recent valuable contribution to our knowledge of "Cicatrization in Blood-vessels After Ligature" has

attracted so much attention at home and abroad that we append, at this late day, his conclusions:

A careful examination of the literature on the subject of this paper, as well as the results of my own investigations, warrant me in submitting for your further consideration and discussion the following conclusions:—

I. All operations on blood-vessels should be done under anti-septic precautions.

II. The aseptic catgut ligature is the safest and most reliable agent in securing provisional and definitive closure of blood-vessels.

III. A thrombus after ligature is an accidental formation which never undergoes organization and takes no active part in the obliteration of a vessel.

IV. The intra-vascular or definitive cicatrix is the exclusive product of connective tissue and endothelial proliferation.

V. Permanent obliteration in arteries takes place in from four to seven days, in veins in from three to four days.

VI. In ligating vessels in aseptic wounds the vessel sheath can be opened freely without compromising the integrity of the vessel tunics, and such procedure renders the operation safer and easier of execution.

VII. The double aseptic catgut ligature should be preferred to the single ligature in ligating large arteries in their continuity near a collateral branch, and should always be employed in all operations of tying varicose veins in their continuity as the safest and most effective measure in producing definite obliteration.

We are not able to fully agree with Professor Senn in *all* his conclusions, nor do we deem them entirely justified either by “a careful examination of the literature on the subject” or the results of his own investigations. During the discussion of his paper, probable sources of error in the experiments and fallacies in argument were pointed out by Dr. Donald Maclean, of Detroit, Dr. Henry F. Campbell, of Augusta, Dr.

E. H. Gregory, of St. Louis, Dr. J. S. Billings, United States Army, Dr. B. A. Watson, of Jersey City, and Dr. C. B. Nancrede, of Philadelphia.

The bibliography is not complete. The researches of French surgeons have received less attention than they merit, while the important investigations of Dr. O. F. Shakspeare, and B. Alexander Randall, of Philadelphia, are scarcely more than mentioned.

We are of the opinion that a large part of the value of the paper lies in the stimulation imparted to original research,—a field, with whose topography American surgeons are too little acquainted.

Professor Senn is entitled to the gratitude of the profession for this, as for numerous other meritorious contributions to surgical literature.

W. W. J.

A MANUAL OF DERMATOLOGY. By A. R. ROBINSON, M. B., L. R. C. P. and S. EDIN., *Professor of Dermatology at the New York Polyclinic, etc., etc.* 8vo, cloth, pp. 647. New York: BIRMINGHAM & COMPANY. 1884.

The author of this new and interesting treatise on diseases of the skin, announces in his preface that this is the precursor of a volume devoted to the same subject, that is to be larger, more pretentious, and more original in character. An examination of the pages before us justifies the opinion that if the succeeding work realizes the promise that is here given, it will assuredly command the success it deserves.

Dr. Robinson has long been known to the profession of this country by his valuable contributions to dermatological subjects made from time to time in the columns of the medical press. Almost without exception these papers have been characterized by a merit due to original and laborious patho-

logical research. As a consequence, few of the later contributions to Dermatological literature of any pretension to a systematic exposition of the entire field, can be compared with the volume before us. In merely glancing over its pages, one is struck with not only the number of illustrations, most of them drawn from microscopical preparations made by the author's hand, but also by the number of subjects to which he has by his own writings made the latest and in many senses the largest contributions. Thus, for example, the brilliant discovery, quite his own, of the existence of both afferent and efferent nerve fibres in the tactile corpuscles, and of the double axis-cylinders in the Pacinian bodies; his well-known establishment of the real relation of several of the derangements of the sweat-secretion to the anatomical seat of the disorder; his clear demonstration of the difference between lichen planus and lichen ruber, an achievement which alone would entitle him to position as a pathologist of high rank,—these results of his untiring industry serve to embellish his pages with a lustre which only too few modern authors can hope to enjoy.

Dr. Robinson, as is well known, is no narrow specialist, but a physician in large general practice, and his pages abound with proofs that his field of labor is not bounded by imaginary lines. His style is terse and effective, his descriptions clear, his suggestions always practical and unbiased by prejudices. His chapter on syphilis is particularly good; and we are pleased to note here that in describing the earliest exanthem of that disease he uses the adjective "macular" instead of "erythematous," in naming the syphiloderma, thus enlisting in the effort to dismiss the abandoned phrase to the old-fashioned category of "syphilitic psoriasis," "syphilitic roseola," and "syphilitic lupus,"

The classification of diseases adopted in the present work is

that of Hebra, slightly modified. Of that adopted by the American Dermatological association, the author remarks that it "was decided by balloting, and never should have seen the light." There are many who will not agree with him in this rather sweeping statement. The classification of the American Dermatological Association was modified at its last meeting at West Point, and in the balloting by which position was assigned to each disease, Dr. Robinson took an active part. Like his own, that classification is based on Hebra's system. There has been no classification ever published in this country which can be compared in its educational influence with that of the American Dermatological Association. Hundreds and thousands of young American physicians have acquired, through its aid, a fund of information respecting at least the rudiments of cutaneous medicine. It is not a perfect classification; indeed, none can be framed for years to come which will even approximate such a standard of perfection. At this hour, when a new bacillus is springing into the view of almost every explorer of the pathological field, it is possible to anticipate the day when the present narrow limits of the class in which are found the parasitic disorders may be enlarged till the new class VIII, surpasses in dimensions all of its seven fellows together. But, failing the precise knowledge which such an issue implies and demands, we are sure that the classification which Dr. Robinson thinks should not have seen the light, is still the best working system for the profession at large that it at present possesses.

The work before us is an admirable text-book, and, judged by all standards, can be safely recommended to the practitioner as a valuable aid in the study of diseases of the skin.

J. N. H.

VOICE, SONG AND SPEECH: A PRACTICAL GUIDE FOR SINGERS AND SPEAKERS; FROM THE COMBINED VIEW OF VOCAL SURGEON AND VOICE TRAINER. *By* LENNOX BROWNE, F. R. C. S., Ed., and EMIL BEHNKE, *Teacher of Voice Production, etc. With numerous Illustrations.* 8vo., cloth. pp. XV—322. New York: G. P. PUTNAM'S SONS, 1884; Chicago: JANSEN, MCCLURG & CO.

The value of this work is greater on account of the rarity of such treatises. Then it is indispensable to voice trainers and to physicians as well. Its numerous plates, including several photographs of the vocal cords, are well executed, and the whole volume is made up in the English high style with a quantity of blank space. As a book of reference it is a valuable addition to any library. And it will convey to any physician a good deal of information for which he may often vainly be called upon by the operatic class. The latter chapters treat of the Ailment of the Voice Uses, and of Defects of Speech—Stammering, etc.

H. D. V.

NEWS ITEMS.

THE ALUMNI ASSOCIATION PRIZE OF THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.—This prize of five hundred dollars, offered to the competition of the Alumni of the College, will be awarded at the next Annual Commencement, May 11, 1866.

The competing Essays must embody the result of *original research* upon some medical subject. They must bear a motto or device, and be accompanied by a sealed envelope bearing the same motto, and containing the author's name and address.

Essays should be sent before April 1, 1866, to any of the committee undersigned in New York city.

E. C. SEGUIN, M. D.

J. WEST ROOSEVELT, M. D.

M. ALLEN STARR, M. D.

Messrs. R. L. Polk & Company, of this city, announce, as in preparation, a new Medical and Surgical Directory, in which they propose to give the name and address of every physician in the United States; also, the name of the college, whether regular or irregular, from which he or she graduated, and the year of graduation. This is to be supplemented by a list of (the names of) Medical Journals published in the United States, names of all Medical Colleges in our country, State Boards of Health, and the laws of different States governing the practice of medicine, and other information relating to the medical profession, of interest to physicians.

LOCAL NEWS.

PROFESSOR E. O. F. ROLER has been elected Emeritus Professor of Obstetrics in the Chicago Medical College. Adjunct-Professor W. W. Jaggard has been elected Professor of Obstetrics in the same college.

Dr. N. S. Davis, Jr., Lecturer on General Pathology and Pathological Anatomy, will supply, during the ensuing session, the vacancy caused by Professor Christian Fenger's resignation. Dr. Davis is about to return from a residence in Vienna and Heidelberg, where he has been engaged in the study of Pathology.

DR. SENN, of Milwaukee, Wisconsin, has accepted the Chair of Principles and Practice of Surgery in the College of Physicians and Surgeons, of Chicago, and Dr. Christian Fenger that of Clinical Surgery, in the same college.

SANITATION IN CHICAGO.—Dr. Oscar C. De Wolf, Commissioner of Health, of Chicago, has received an appropriation of \$100,000 from the City Council for the purpose of improving the sanitary condition of Chicago. Thirty-four Sanitary Inspectors have been appointed, and it is intended that 50,000 houses shall be inspected before the first of September.

THE CHICAGO MEDICAL JOURNAL AND EXAMINER.

VOL. LI.

AUGUST, 1885.

No. 2.

ORIGINAL COMMUNICATIONS.

A REPORT OF A CASE OF A FŒTUS ENCLOSED IN ITS SISTER'S PLACENTA. *Fœtus compressus. Fœtus papyraceus.* By JAMES H. ETHERIDGE, A. M., M. D., *Professor of Materia Medica and Medical Jurisprudence, Rush Medical College, Chicago: Gynecologist to Presbyterian Hospital; Gynecologist to Central Free Dispensary.*

(Read before the Chicago Gynecological Society, 16th June, 1885.)

On September 26th, 1882, Mrs. T. J. B., aged twenty-two years, of a nervous sanguine temperament, and healthy, was delivered of a healthy, well-formed female child at term, after a normal labour of four hours' duration. During the delivery of the placenta some abnormality was detectable, which proved to be a *fœtus papyraceus*.

The extreme rarity of such an occurrence has led to a careful investigation of the subject, which is herewith recorded.

The outer surface of the placenta.—The appearance of the uterine surface of the placenta at once arrests attention. A deep furrow separates the two placenta, which are united on their amniotic surfaces by a series of compact white bands discov-

erable only by pressing through the furrow. The larger placenta constitutes about two-thirds of the entire mass. The smaller placenta is thin, flat and compact, being about one-third as thick as the larger one.

The placenta of the living child is normal throughout its extent. Its cotyledons are well marked, the tufts and villi presenting normal microscopical appearance. It is free from fatty and calcareous degenerations.

The placenta of the *fœtus compressus* in about nine-tenths of its extent is whitish-yellow, very firm, free from cleavage, and it feels much firmer and more compact than the spongy cotyledons of an ordinary placenta.

The whole thickness of this portion of the placenta, excepting its amniotic surface, presents one unbroken mass of fatty degeneration. The remaining one-tenth of the placenta presents a carneous appearance, evidently a transition stage between normal placenta and complete fatty degeneration. Its cotyledons are enmassed, and its tufts and villi solidified, and the whole is interspersed with initial fatty depositions.

The fetal surface of the placenta.

The two segments were wholly different at the time of birth. The placenta of the living child presented an entirely normal appearance. Its cord is inserted about four cm. from the free border away from that of the dead fœtus. The placenta of the *fœtus papyraceus* presented the appearance of a closed bladder, which upon examination was found to be an unruptured amnion containing amniotic fluid and a fœtus. The fœtus, felt at the placenta's delivery, is what constituted the abnormality thus noticed.

The fœtus.—The sack, being opened, revealed a compressed fœtus of about three months' growth. It rested with its back towards the free border of the placenta and the anterior sur-

face of the body towards the line of union of the two placentæ.

Its right arm lay in *front* of the chest, the fingers resting near the left acromion process. Its left arm lay in a similar position *behind* the thorax, the fingers resting over the right scapula. The legs were well drawn up till the feet rested on a level with head.

The head was turned so that the chin covered the left shoulder.

In this position the entire fœtus was compressed tightly by its rapidly growing sister till, at birth, it presented the flattened-out appearance which gives it its name, *fœtus compressus*, or *fœtus papyraceus*. The body was flattened from before backward, while the head was flattened from side to side. The two parietal bones made a wedge. The occipital bone lay across the lower segment of the wedge. The two frontal bones made a wedge. The lower jaw also made a wedge. The outline of the head was rhomboidal. The fissures for the eyes were clearly seen. The nose was much flattened. The tongue was especially easily shown.

The cord of the *fœtus papyraceus* was longer by ten centimeters than its fellow, and much thinner. It was inserted quite at the line of union of the two placentæ. It was not unusually twisted.

The following measurements of the fœtus and placenta have been taken :

FŒTUS.

Vertex to coccyx.....	12	centimetres.
Right arm, including hand.....	6	"
Left " " "	7	"
Left thigh.....	3	"
" leg, including foot.....	7	"
Acromion to acromion.....	4½	"

Head—

Oblique diameter—largest.....	4 centimetres.
“ “ —smallest.....	3½ “
Straight “.....	3½ “
Width.....	1⅓ “

PLACENTA.

1. Of the living child—

Long diameter.....	12 centimetres.
Short “	10 “
Cord—length.....	30 “
“ —thickness.....	1¼ “

2. Of the *fœtus papyraceus*—

Long diameter.....	11 centimetres.
Short.....	7 “
Amnion.....	9 “
Cord—length.....	40 “
“ —thickness.....	4-10 “

PATHOLOGY.

Various causes produce the death of the fœtus. The following may be mentioned:

1st. Faulty insertion of the cord at the margin of the placenta adjoining its fellow, leading to its fatal compression, has been advanced as a possible cause of death of the fœtus. KIESELHAUSEN mentions this faulty cord insertion combined with an extravasation of blood between the placenta and uterus at the location of the placenta of the smaller ovum as the cause of death in the two cases cited in his report (*Dissertatio inauguralis. De fœtibus immaturis uno partu cum maturis editis.*)

2nd. Faulty structure of the cord is another cause of death of the fœtus, as a membranous cord, a thin cord, a twisted cord, or one that is deficient in gelatine, and hence is emaciated and constricted in place.

C. BRAUN found in one case that the cause of death was the membranous insertion of the cord together with its numerous windings about the neck and extremities of the fœtus. (*Breslau. Monatschrift. für Geburtsk. und Frauenkrankh. xiii, 470.*)

3rd. Disease of the placenta was at one time also given as a cause of death of the fœtus. However, HECKER, in 1861 (*Klinik der Geburtskunde, Leipzig*), and KLEINMEISTER, in 1871 (*Lehre von den Zwillingen, Prag*), considered placental diseases as secondary in the cause of death. It would appear rational to conclude that any systemic condition, as syphilis, would lead to disease of both placenta instead of but one placenta. Under the head of "*Fibrous obliteration of the placental villi with or without fatty degeneration*" have been described, *induration* of the placenta, *encephaloid placenta*, *scirrhus placenta*, *tuberculous placenta* and *fatty placenta*. Any one of these conditions may cause the death of the fœtus.

4th. Violence may be reckoned as another cause of death of the fœtus.

I delivered a stout English woman of twins, with *placenta prævia*, where one fœtus was at full term and the other was about four months advanced toward maturity. She affirmed that at that time she fell, one day, against a tub, striking its edge with her abdomen. A slight hæmorrhage occurred at the time. Ever after that she felt sore at the point struck. The inference is that a sufficient violence was done to cause a hæmorrhage into the villi of the chorion, which caused the death of the fœtus.

5th. Another cause of death of one fœtus may be the implanting too closely together of the umbilical vessels, whence result arterial anastomoses. Thus the blood current of one system may become more powerful than the other, and the

main stream becomes diverted toward the more powerful one. The circulation of one fœtus is progressively impaired till it perishes, when at the same time its *liquor amnii* is secreted no more.

References :

The extreme rarity of *fœtus papyraceus* is shown in its seldom being reported in current medical literature and in its rarely being mentioned in works on midwifery. A search through the Library of the Surgeon General's office at Washington, resulted in finding five references to reports of similar cases, which are herewith given. It is doubtless true that many cases would be reported were it not for the hasty and imperfect examinations of placentæ made by physicians, which result in completely overlooking the presence of an enclosed fœtus.

The writer has looked through full files of the following named journals, to secure as many references as possible : *The American Journal of the Medical Sciences*; *The Boston Medical and Surgical Journal*; *The New York Medical Record*; *The Ohio Medical and Surgical Journal*; *The New Orleans Medical and Surgical Journal*; *The London Lancet*; *The Times and Gazette, London* (9 years); *The American Journal of Obstetrics and Diseases of Women and Children*; *The Obstetrical Journal of Great Britain and Ireland*; *Annales de Gynécologie*; *Archives des Tocologie des médicaux des femmes, etc.*; *The British Medical Journal* (12 years.). All of the "Text Books of Medicine and Surgery" of the New Sydenham Society. *Braithwaite's Retrospect* (44 years.)

In addition to the foregoing, every obtainable systematic treatise on obstetrics has been consulted. Out of all this mass of literature the following references only to cases and to the subject could be culled.

1. Bard's Midwifery, 4th ed., p. 202, N. Y., 1817, contains an excerpt from "*Perfect's Cases*," v. ii., p. 159, describing an "undeveloped twin fœtus of the size of the little finger."

2. A case reported in the Medical Repository of N. Y., 1813, i. n. s., p. 383.

3. A case reported in the Boston Medical and Surgical Journal, 1854, xlix, p. 163.

4. Dr. C. McGibbon reported a case of fœtus papyraceus in the New Orleans Medical and Surgical Journal, Sept., 1850, which grew till the 4th month and was retained till full term. *Fœtus papyraceus* born first. Other full-grown but still-born.

5. Dr. J. B. Davis, of Franklin Co., Ohio, reported a case in the Ohio Medical and Surgical Journal, Sept., 1850, where the large twin was a seven months fœtus and the *fœtus papyraceus* was about a ten weeks' product, "fresh and free from all signs of putrefaction."

6. Case in the British Medical Journal, 1869, v. i., p. 141.

7. Case reported in the Detroit Lancet, v. iii., p. 204.

8. Case given in the Chicago Medical Journal and Examiner, 1877, v. xxxiv., p. 410.

9. Case reported in the Lyon Medical, 1873, v. xiii., pp. 304-307.

10. Case reported by Paul Ruge in Beiträge zur Geburtshülfe und Gynäkologie, 1870-1872, b. i., p. 141-144.

11. Case reported in same journal, 1872-1873, ii. b., p. 94.

12. Schuster (W) Die Entstehung des Fœtus Papyraceus und sein Vorkommen bei einfachem und doppeltem Chorion. 80 Strassburg, 1876.

13. Dr. Edis exhibited a case of arrested development of fœtus in twins to Lond. Obst. Soc., Oct 3rd, 1883. One fœtus born alive at seven months, and other, expelled seven hours

before, was shriveled and its placenta atrophied, having apparently died two months before.—*Brit. Med. Jour.*, v. ii., 1883, p. 778.

14. Dr. J. R. Kirkpatrick exhibited a mummified fœtus of a twin pregnancy, gone to full term, to the Obst. Sect. of the Acad. of Med. of Ireland, Dec. 22, 1882. She had died about the sixth month. There was a single placenta and double membranous sac. "The portion of placenta which belonged to the mummified fœtus was shrunken and degenerated."—*Brit. Med Jour.*, v. i., 1883, p. 210.

15. Case reported by Dr. E. W. Kneppen, of Ligonier, Ind., in the *American Journal of Obstetrics*, v. xvii, 1884.

16. Case reported in the *Boston Medical and Surgical Journal*, Dr. R. Kingman, 1885. v. cxii, p. 12.

17. In Mauriceau's "observations sur la grossesse et l'accouchement des femmes," page 503, (4th edition, Paris, 1740), is given a case which the author attended, October 12th, 1693.

18. In "Burton's Midwifery" (London, 1751), two cases are cited, with the particulars of each are described. In one case the fœtus is described as being "compressed quite flat," and the author even presents a drawing of this fœtus papyraceus. In this rare work is quoted a case from *Johannes Daniel Geyernus*, who found in a full-term placenta "inclusum alterum filiolum ad spithamæ longitudinem."

19. A case is mentioned by Ed. Chapman, ("A Treatise on the Improvement of Midwifery," p. 66, London, 1735,) which is referred to as "an emaciated child."

20. In Smellie's Midwifery, 4th edition, London, 1768, are references to two cases of included fœtus reported to the Academy of Sciences at Paris in the years 1702 and 1729 respectively. In this book is quoted, from Ruysch of Amster-

dam (in Tom. i. oburo. 14,) the case of a surgeon's wife, delivered at term of a small foetus, 6 hours after the birth of a strong live child. The funis of the embryo "was full of hydatids."

21. Denman, in his "Practice of Midwifery," p. 555, (N. Y., 1821,) says that a twin dying in utero "may be quite flattened or compressed into any other form" by the surviving one, and that at the last it "may be detained several days or weeks" after the expulsion of the living child.

22. Joulin, in "Traite Complet d'Accouchements," p. 757, (Paris, 1867,) quotes a case cited by Guillemau, "where the dead foetus remained two years in the uterus after the delivery of the other twin."

(The last six cases I am able to report through the courtesy of Dr. John Bartlett, whose rare collection of old treatises on midwifery was kindly placed at my disposal.)

65 Randolph Street.

SOME CONSIDERATIONS RELATING TO SHOCK AND NERVOUS
INFLUENCE IN PARTURITION. By HENRY P. NEWMAN, M. D.,
Detroit Medical College, 1878. Chicago.

(Inaugural Thesis read before the Chicago Gynecological Society, 17th July, 1885.)

In considering the rapid progress in gynecology and the art and science of obstetrics, and the gratifying successes attending the efforts of our foremost investigators, the unexpected and untoward results which occasionally occur in the practice of the most skillful, point us to yet broader fields for research and profit.

Several cases recently reported by such obstetricians as LUSK, PARTRIDGE and SMITH, of sudden loss of life in labour and childbed, have recalled our attention to a factor to which the former is inclined to attach much importance, and of which

he speaks under the head of nerve-exhaustion and shock, briefly but eloquently acknowledging the poverty of literature upon the subject and appealing for a more thorough consideration of its value and import.

"Twenty years ago," he says, "these two pathological states played a conspicuous part in the etiology of sudden death in child-birth. Now the fashion has changed. Such terms as 'Nervous Apoplexy' or 'Idiopathic Asphyxia' belong to an almost forgotten nomenclature. And yet, none the less, the necessity remains to account for a class of cases in which death takes place without recognizable organic lesion."

While the writer has not suffered the misfortune of cases of marked and sudden fatality, he cannot but associate many instances of distressing and protracted after-symptoms attendant upon the puerperal state, with an abnormal nervous condition, rather than any direct local lesion.

And it is to these constantly recurring examples, rather than to the phenomenal and more scattered instances of rapidly fatal termination, that we must look for more promising and satisfactory data.

With the limited time at command, and the paucity of technical literature upon a subject pertaining as much to the domain of psychology as to any material science, we submit the following three cases in practice, as additional testimony to the importance of recognizing the different phases of nerve-influence and shock in parturition.

CASE I.—On the 5th of the present month, I was called about midnight to see Mrs. H., a healthy woman of thirty-five years, mother of five children.

I found her suffering the cutting, grinding pains of the first stage of labour, which had been in progress since early evening. The cervix was dilated to the size of a half-dollar, the

membranes were intact, and the soft parts were well bathed with the usual mucous secretions.

With each paroxysm of pain, the membranes became tense, the uterus contracted moderately well and everything gave promise of the normal progress of labour.

Though apparently of strong constitution and well able to endure her share of physical suffering, I observed that the patient was greatly agitated and apprehensive, each succeeding pain having the visible effect of fretting her beyond reason, and lessening her powers of endurance.

This led me to inquire more particularly into her former history, disclosing the fact that, with the exception of the first, her previous labours, though attended by no noteworthy accident, had each been prolonged from three to five days, greatly exhausting the parturient and retarding convalescence.

The conduct of her first labour had been very unfortunate. Large and repeated doses of ergot had been exhibited, which resulted in impaction and finally forceps delivery, without anæsthesia, and badly lacerated cervix and perineum.

From the shock of such an experience the woman recovered with a very natural horror of the function of reproduction.

In the last instance, a firmly-rooted apprehension of disaster, amounting to superstition, and enhanced by the prophetic statement of her former accoucheur, that she would never live through another pregnancy, had taken complete possession of her mind.

With such a history before me, and seeing that little appreciable progress had been made in the intervening hour, I carefully examined the presenting part,—to find a possible cause of delay,—the pelvic cavity, the abdomen, vagina, bladder and rectum, with negative results, excepting that the uterus was now gradually retracting upon its contents, as evidenced by

the hardening of the uterine walls and rigidity of the cervix; further, the pain was now constant and the paroxysms more severe.

Realizing that the woman was becoming needlessly exhausted, I administered a full dose of morphine hypodermically. The effect of the opiate was a quieting of the extreme reflex irritability and great relief to the sufferer.

Living at some distance from my patient, I remained at the house until the morning. The opiate was repeated at daylight and again about six A. M., when I left, with instructions to call me when pains returned with any degree of regularity or severity.

There was no summons until six o'clock in the evening. The patient was then in much the same condition as on the previous night, and she had suffered from more or less irregular contractions during the entire day.

I determined on active measures to relieve the woman and sent for an assistant with instruments. Meanwhile, an attempt was made by the fingers alone at forcible dilation of cervix. Two hours of patient and persistent effort—using chloroform to allay pain and nervous irritability,—were rewarded by sufficient dilatation to allow the introduction of Bartlett's modified Tarnier forceps. Having ruptured the membranes, the head was grasped at the superior strait. Alternate traction and relaxation simulating nature's effort, served to complete dilation at the end of another half hour, when delivery was accomplished without further trouble.

After forcible expulsion of placenta, Credé's method, the uterus contracted fairly under a single dose of ergot. The patient re-acted well, and she is at present progressing favorably, notwithstanding the unavoidable presence in the same set of apartments of two cases of scarlatina, developed on the ninth day, and a third on the twelfth, of the puerperal state.

CASE II.—On a Sunday in December, 1883, I was hastily summoned to the bedside of Mrs. D., a frail, nervous woman of middle life, a multipara. I found the patient pale and nerveless with cold extremities, feeble, thready pulse, and perspiration standing upon the forehead.

The following circumstances were related by the husband and midwife in attendance :

Labour had been in every respect normal and had proceeded as far as the second stage, when in the absence of the husband and momentary absence of the midwife, the patient had been violently startled and labour instantly arrested, by the entrance of a sneak-thief who roughly threatened her life with drawn revolver.

Examination showed the cervix fully dilated, with the head engaged in the left occipito-anterior position.

Under restorative measures, the woman rallied somewhat from her stupor, but the uterine inertia continued and I applied forceps and effected delivery without further delay.

Credé's method and ergot were employed to expel the placenta and to insure retraction of uterus.

The patient remained in the state of partial stupor, induced by the shock, throughout the night. In the morning the temperature rose to 102° F., and so continued, with but slight variation, during the ensuing four days.

On the morning of the fourth day, the temperature was 104° F., and a very mild attack of septicæmia ensued, without recognizable local inflammation. Its duration was about one week. Finally she made a slow but uninterrupted recovery. There were four cases of scarlatina in the house at the time, three of them fatal, one in the patient's family, and nursed by her until her confinement; a circumstance which may account for the septicæmia.

CASE III.—Mrs. L., primipara, twenty-one years of age, of slight and delicate appearance, but strong, “wiry,” nervous constitution, was taken in labour July 11th, 1883.

The duration of the entire labour was about eight hours; the pains of the first stage were very severe and protracted, but bravely borne.

From the rupture of the membranes, which occurred prematurely, until full dilatation ushered in the second stage, the suffering rapidly increased, reaching supreme agony in the violent and uncontrollable uterine contractions, attending the stage of expulsion.

Except in the somewhat tedious process of dilatation, and the suffering induced by the exaggerated reflex nervous influence in the second stage, this was in every way a normal labour.

With the culmination of anguish and the entrance of the child into the world, the mother lost consciousness.

This was superseded by great exhaustion and pallor; nausea and benumbing of the intellectual faculties, with arrest of uterine action, compelling artificial delivery of placenta.

The shock was all but fatal, and the nervous exhaustion so complete that reaction was barely induced by the use of restoratives and stimulants.

Five or six weeks of great mental depression followed, characterized by extreme indifference to child, friends and life.

During this time she suffered from pelvic peritonitis of a severe type for one uncomplicated by sepsis.

Convalescence was very slow.

Returning to Case I, I regard it as a pointed example of the inhibitory influence of the uterine nerves of cerebro-spinal origin, interfering with the rhythmical uterine action and thereby prolonging the labour.

Such a condition demands prompt interference in the first

stage, to guard against the depressing influence of severe and protracted suffering, and the consequent dangers of exhaustion.

From the history of this case and the very thorough examination I made, I cannot entertain any theory that will account for the wearisome delay in delivery, except that of the disturbing influence of the woman's overpowering dread and nervous excitement.

The remembrance of the ordeal of her first childbirth, refreshed by frequent pregnancies, and the gossip of cronies, had engendered in her mind a morbid apprehension of the event, intensified by each period of suffering and the slow and fatiguing recoveries.

I am confident that had she been allowed to exhaust herself in the last instance, by prolonged and fruitless travail, the outcome would have been serious, taking into account the domestic situation which followed.

But of these three cases, No. II is perhaps the most striking and undeniable proof of the ascendancy of mind over matter; a mental emotion of great violence actually preventing the completion of a physiological process.

In a less marked degree, I believe that the mental impressions which obtain during childbirth, strong in proportion to the intelligence and susceptibility of the individual, are etiological factors, which must be recognized in the handling of the puerperium.

The subsequent history of Case III has been a most flattering confirmation of these views.

She has been under my direct supervision during another pregnancy, and the value of the prophylactic treatment employed throughout the period, has been beyond estimate.

Having gained the confidence and coöperation of the patient, she was withdrawn as far as possible from the influences and associations which formerly governed her life.

The active intellectual exercises and artistic pursuits for which she had great talent, were prohibited, and the calm routine of domestic occupations substituted; absence from the city, during the heated term, supplied a grateful change of scene and surroundings.

Finally the mind was kept from dwelling upon the dreaded ordeal of labour by the assurance that she should be spared by anæsthesia the consciousness of an unnecessary degree of suffering.

Carrying a very large child, the latter weeks of gestation were attended by great discomfort, and the advent of labour was a welcome event.

BARUCH, in an article entitled, "Management of the Third Stage of Labour," comparing the labours of the refined city-bred woman and her antitype, the healthy aborigine, makes the point that while in the latter the first stage is vigorously performed, and she seems to be ushered at once into the next, in the former the chronological relation between the two stages is reversed; owing to the predominance in the higher type of the sympathetic system of nerves in the first stage, and the more pronounced influence of reflex action in the second.

This is precisely what occurred in the case of Mrs. L.

In her first labour, representing the exaggerated type of the nervous woman of artificial refinement, the first stage was protracted and severe, and the second rapidly concluded. While in the second delivery, after the establishment of a more equable relation between the physical and psychical organizations, and calming of the nervous excitability, the stage of dilatation was short, the second more protracted and less violent.

Chloroform was administered to partial anæsthesia just before the rupture of the membranes and its use continued until after expulsion of placenta.

The entire labour occupied about five hours, reaction took place promptly.

There was not the slightest rise in temperature above normal during the following ten days.

The mental condition of the patient was tranquil and happy, exhibiting the natural and normal culmination of the process of parturition.

* * * * *

In all such cases the details of prophylaxis will suggest themselves to every intelligent accoucheur, and will accord with individual requirements.

Among the most serviceable therapeutical agents in controlling reflex nervous irritability during parturition, are our list of anæsthetics, chloroform, ether, nitrous oxide, bromide of ethyl, with chloral, bromides and the opiates.

The superiority of bromide of ethyl over chloroform as an anæsthetic is urged by Dr. Montgomery, of Philadelphia, in the June number of the *American Journal of Obstetrics*.

The claims recently made for *cimicifuga racemosa*, in a paper read before this Society, by Dr. J. S. Knox, would certainly recommend its use in this class of cases as preparatory treatment.

The last two named, like every other measure which promises to facilitate labour and mitigate the extreme and unnecessary pain frequently experienced in childbed, demand fair trial.

Rich in possibilities and suggestions as is such a subject, the purpose of this paper will have been served in drawing attention to its application in the alleviating of human suffering, which in parturient women is often sufficient to dethrone reason and destroy life; and the abolition of a long train of nervous ailments and distressing reflex symptoms incident to pregnancy and calculated to exhaust and enfeeble the maternal

system; thus exposing the patient to the dangers which threaten the post-partum state.

In conclusion we offer the following suggestions :

1st. That we have a higher nervous organization presiding over the process of childbirth and subjecting it to like influences and derangements which obtain in other physiological functions.

2nd. As civilization advances, the co-relation of mind and matter becomes more intimate and complex, and calls for a proportionate advance in psychological therapeutics, and the application thereof to cases of predominant mental and nervous influences.

3rd. In many cases of so-called tedious labours the irregular contractions of the first stage are the result of an exalted state of nervous irritability.

4th. Active interference is indicated in many cases of protracted labour due to nervous influence, to guard against the dangers of exhaustion and shock.

5th. Much is to be expected from judicious prophylaxis. Especially would I urge the necessity of direct professional supervision over the entire period of gestation from the earliest months.

6th. There will still remain to be combated social, moral and educational environments, which we can scarcely expect to see abolished, until the laity, as well as the profession, is better informed as to the deleterious consequences of departure from the standard of physiological perfection in the mothers of our race, and the best means of approximating that equipoise of the mental and physical organization which it is primarily the design of nature to establish.

182 North Halsted Street.

ON THE DIET AND MANAGEMENT OF ARTIFICIALLY FED INFANTS. By ADDISON H. FOSTER, M. D., (*College of Physicians and Surgeons of New York, 1866,*) *Chicago.*

(Inaugural Thesis, read before the Chicago Gynecological Society, 17th of July, 1885.)

This subject was not selected with the expectation of presenting anything original or exhaustive, nor with any attempt at scientific color, but to offer a few instances and results of experience as additional testimony to the value of the teachings of JACOBI, SMITH, and others, and to afford an opportunity for suggestive hints in the management of this unfortunate class of little patients.

The problem of infant food is one the general practitioner has often to meet and solve, under a sort of algebraic process of letting, first, this article of diet, and then that, represent the supposed factor of benefit, until the one filling the conditions of the case is discovered. This subject concerns, with others, especially those parents whose nervous and physical forces are more or less exhausted by the increasing social and business demands of a ceaseless metropolitan activity, and whose children are thereby too little endowed with that reserve vitality so essential to sustain their nervous and physical balance.

Too often an apparently well-nourished child is a martyr to colic or persistent sleeplessness, from the imperfect breast-food of its devoted, but never rested mother, and it will be benefited by an artificial diet, never as digestible as nature's intended perfect food.

Infants, too, are not readily acclimated to the subtle, pernicious atmospheric influences of a populous city, and the consequent depression to their vitality demands an extra care in their diet, which the country-reared infant does not require. Neither has the city-fed infant an equal opportunity with its

country cousin in regard to its milk. It is almost impossible to get that article pure and fresh for a majority of these bottle nurslings; some of the more favored ones occasionally do, when the parents are able to keep a healthy cow for that single purpose, but it must be stalled in a large dry barn, fed on the best of hay and grain, with pure water to drink, and if it has not plenty of yard-room for open air and exercise, must be well groomed every day.

Seven years ago, it was my lot to care for twins deprived of breast milk from their birth. Their milk was from a fine healthy cow, pastured on the prairie in the west of the city: all ways and means failed to adapt the milk to their digestive organs. The cow's condition was then changed to that noted above, and in a very few days the twins were thriving well, with the aid of "Robinson's Prepared Barley," which had, with almost every other kind of infants' food, been previously tried without success. Several weeks afterwards, while they were still in good condition, a supposed mad dog bit the cow, and the parents refused to give her milk to the infants. Fresh new milk, from single prairie-fed cows, was tried with almost disastrous bowel effects. It being mid-summer, the original cow's milk was ordered, resulting in a return to their former healthy condition within two weeks.

This individual sensitiveness to different kinds of fresh milk, especially in the season of bowel disturbances, is doubtless a common experience, but the writer cannot refrain from giving additional testimony.

Three years ago, six infants were certainly saved a long and dangerous illness, if not their lives, by finding the proper kind of milk. In one instance the relatives of a prominent druggist were offended, that their usual supply of fresh milk was criticised. "It had been brought fresh from the stone quar-

ries every morning for two years." The patient of one year was a visitor, and suffering from a very intractable stomach and bowel attack. All remedies were useless when any of the prairie-fed milk was used. Finally they consented to a trial of milk brought from Evanston (12 miles distant), direct from the druggist's cow. In three days hardly any bowel remedies were needed, and a neighboring stall-fed cow was soon found, whose milk agreed equally well. In the same neighborhood, our highly esteemed friend and practitioner, Dr. John Bartlett, had exhausted nearly all his therapeutical resources upon a child in a similar condition, and had ordered it, as probably all of us have in a like dilemma, around the lakes. Through an accident to one of the family, this child's case came under my observation. The mother could not now make the trip, and the child's milk supply being mistrusted, the above cow's milk was advised, with the doctor's remedies continued. In less than a week there was no need of a lake trip: the former milk was fresh, but from the prairie. The same season a delicate babe with bowel trouble had baffled the healing art of a homeopathic practitioner for weeks—orthodox treatment under my hands was not more successful. The milk was from the cow, night and morning, but she was prairie-fed and watered. Finally the family was persuaded to go a mile for the nearest proper milk. The change for the better was not rapid, but it was marked and constant until complete recovery.

Permit one more case, illustrating a sensitive stomach: A delicate little girl of fifteen months, reared with a most untiring and scrupulous care in the details of management, was suddenly seized in March, 1880, with vomiting and diarrhœa, which could not be accounted for, until, by strict inquiry, it was learned that the cow, two days before, was fed from a new load

of hay, which was acknowledged to be of inferior quality. The child could not continue the milk until the hay was changed for the better. Unless fresh milk is of the proper quality and agrees, we often have to resort to milk-man's milk, from the various kinds of so called "Elgin Dairy." This milk, which is always at least twenty four hours old, will agree with some healthy infants, but they are very few, in my experience, and almost never without the addition of some kind of thin gruel. With any milk, for infants under three months, Mellin's food is preferred, which is more palatable and successful than Horlick's, although supposed to be identical in composition. With Mellin's food, condensed milk occasionally agrees, but condensed milk disappoints so much more frequently than ten years ago, that it is rarely encouraged, if proper fresh milk can possibly be procured. The brand preferred is the Anglo-Swiss, or that condensed in England. In this city, the gruel probably used more than all others together, especially without a physician's advice, is that from Ridge's food. This is always encouraged, and often succeeds, from the child's birth, but should be cooked longer than the directions require.

Often the indications for Ridge's food is a tendency to looseness of the bowels, and for Mellin's food, the opposite condition. Usually that food will agree best which is most palatable to the child, though if indications demand, we can produce tolerance by the stomach, by beginning with small amounts and gradually increasing that food which has the correcting qualities.

With a few babies, till after two years of age even, the only gruel or article of nourishment, with the milk, that will possibly agree, is rice water, prepared by cooking the best rice, at least three hours. The special indication for this diet is the

constant tendency to diarrhœa. In other cases it has been found as necessary to continue equally long upon "Robinson's Prepared Barley" or "Nestle's Food," "Hubbell's Prepared Wheat" or "Imperial Granum." This latter food is especially good in many cases, and with a little Mellin's food added forms the gruel now being given to three infants under my care. Oat-meal gruel is highly recommended by Dr. Jacobi, for costiveness, but it is liable, in delicate children, to make constipation more costive, or produce an aggravated form of looseness, because not easily digested, although it often agrees with the more robust. It is necessary to use the best quality of oat-meal, which is rarely found at any of our ordinary groceries. The Akron, Ohio, brand is one of the best, and always needs to be cooked three hours at least before straining.

All understand, with Dr. Jacobi, that the gruel is partly for nourishing properties, and partly for the mechanical division of the milk particles, so that the curd shall be more porous and readily digestible.

The great aim is always so to adjust the diet, that there shall be the least possible call for drugs and medicines. In a large majority of cases, the irregularity of the bowels can be corrected by finding the proper food, and laxatives or astringents avoided.

With some infants, digestion is too tardy, and acidity with fermentation supervenes, demanding the addition of some mild stimulating aromatic tea, as that from anise seed, fennel seed or ginger, and often with some alkali, as soda or lime water, which latter has been given for fifteen months, continuously. In some cases of looseness with acidity, prepared chalk is added to each bottle of food. Half an ounce of the chalk in two ounces each of syrup and water, makes a con-

venient mixture from which to give a teaspoonful each time. In others with pain and frequency of passages green and curdy, the old fashioned "red tea" is given before each feeding. This tea consists of one scruple of rhubarb, two of bi-carbonate of soda, one of grated nutmeg, one-half cup boiling water and sugar to the taste; this can be bottled and one-half to one tea-spoonful given before each feeding.

For occasional gastric and intestinal disturbances, whether accompanied by dry, light-colored and offensive stools, or those frequent, thin, and mixed in character, some form of mercury is often used as an antifermentative and secretive stimulant. In the former condition, one-twentieth to one-hundredth grain of calomel, two to twenty-four hours apart, and for the latter, one-tenth to one-hundredth grain of mercury and chalk, two to eight hours apart, according to the condition of the case, will often improve the evacuation in color and consistence. In the loose class it may be best to give the child chalk at the same time. Often derangements of the bowels are the results of too frequent feeding, as well as of too rich diet. There is little danger of too seldom feeding. When there is a crying demand for the bottle, the substitution of warm water, or some light aromatic decoction, two to three times daily, will often prevent the indigestion complications.

The more delicate the stomach, the more carefully must every condition of the food be studied, and when successfully adapted, must be maintained for months with the slightest possible deviation, excepting the gradual increase of the strength and quantity of the food, as the stomach will bear; for intelligent, faithful care in the minutest details of management is as essential as the kind of food; as probably all have seen, in the hands of one nurse, the same food threaten the child's destruction, that in the hands of another would bring strength, health and flesh.

In our dietetic repertory is found "Arend's Kumyss," which even in very young infants has proved very beneficial when given alone, or when milk is added little by little until the delicate stomach can assimilate it without the kumyss.

Peptonized milk also has proved very satisfactory in the limited number of rebellious cases dealt with, and will prove a priceless boon to many an innocent sufferer from disordered bowels. The peptonizing agent used was Fairchild's *extractum pancreatis*.

The question often arises, shall the child have the mixed diet with breast-milk, when the breast supply is limited; certainly, if the breast-milk is healthy, and agrees, for it will facilitate the digestion of the cow's milk and gruel, and keep the bowels regular and natural, but if it disagrees without the artificial food, it is not likely to agree with it.

Infants are sometimes too delicate to become nourished fully by an artificial diet, and will thrive better under daily inunctions of the best salad oil. These should be given immediately after its bath, and the bathing finished by brisk friction with the hands, moist with warm alcohol. Such infants, as well as all others in this climate, should be clothed in warm soft woollens from their birth; and should have the invigorating influence of a well lighted room of south exposure, with as much consideration as the carefully reared house-plant.

The out-of-doors question, in any but the mildest weather, is over done and under done. The puny, bottle-fed infant, kept in a furnace heated house, bears poorly the least sudden change to a cooler air, if not fully protected, or any exposure that chills it in the least, and it speedily becomes a sufferer from congestion of the bronchial or intestinal mucous membrane. It had better remain delicately well in doors, than attempt any hardening process in the cold outside, in this

capricious climate. A few moments of fresh air daily if possible is desirable, but the child must be well wrapped, and the wraps not removed too soon after coming in.

A few conclusions on the foregoing are these :

1st. The artificially fed city infant too often inherits an enfeebled nervous and physical organization.

2nd. Its surroundings are rarely of an invigorating character.

3rd. It usually has a desperate struggle for life with an imperfect diet, for even new milk from the prairie-fed Chicago cow is likely to be harmful.

4th. The wonder is, that so many escape death at the hands of over-anxious but unwise attendants.

132 La Salle street.

SYZYGIUM JAMBOLANUM, (JAMBOL.)*

By C. E. CLACIUS, M. D., *Chicago*.

A new drug was mentioned in the *London Lancet* some months ago under the above name, the bark and seeds of which were recommended as a powerful remedy for diabetes mellitus. It was called a stomachic, carminative, diuretic and astringent. The powdered fruit-stones to be taken in five-grain doses three or four times a day.

From an acquaintance, a diabetic, for whom the writer, during several years, had analyzed the urine and invariably had found from eight to twelve per centum of sugar, the writer received a few weeks ago a portion of urine for examination, with the information that the patient had, for a week before,

*The fruit of *Syzygium Jambolanum*, natural order Myrtaceæ, indigenous in the East Indies.

The fruit is fusiform, about fifteen (15) millimetres long, ten (10) millimetres thick, very hard, brownish-black, astringent, aromatic. In powder it reminds one of pepper in odor. It has been recommended for the elimination of sugar from the urine.—*The Pharmacist*.

used a new remedy, an Indian plant, with such remarkable effect, that he wished to have his curiosity, about the quantity of sugar, gratified.

The urine showed a natural color and smell, had a specific gravity of 1036, and contained no sugar. A few days later the gentleman called in person, and brought with him a small quantity of bark and seeds, which he had obtained directly from London, through the *Lancet*, and reported that during eight days he had taken a decoction of the seeds, corresponding to about half an ounce. Before commencing to take it, his urine had the specific gravity of 1040 to 1042, and he was troubled with a constant dull headache in the occiput. He had to urinate from three to four times a night. The quantity of urine voided was six to eight pints in twenty-four hours. After a week's use of the remedy his headache had disappeared; his sleep was undisturbed, and the quantity of his urine had decreased thirty per centum, and there was no trace of sugar in it. The high specific gravity was caused by a concentration of urea, urates and phosphates in the lessened quantity of fluid. Further observation about the permanency of this favorable change could not be made, as the gentleman left for a European tour a few days later, but he was so elated that he requested the writer to experiment with the drug which he brought, on other patients with the same disease. This has been done, and the result is herewith submitted to the profession for judgment and further investigation:

No. 1. Gentleman, aged seventy-one, suffered from disease since 1880, to his knowledge; then, increasing debility, thirst and flattening of the eyes, more than the large quantity of urine voided, induced him to seek medical aid. The skimmed milk diet, strictly followed for three months, removed the alarming symptoms; after that time he added so-called gluten

bread, meat and claret, and felt quite comfortable, although he voided from three to seven pints of water in twenty-four hours, which varied in specific gravity between 1030 and 1040, and in sugar, between eight and twelve per centum. The writer made occasional analyses through all those years. To this patient thirty-two powders were given, each containing five grains of the powdered seed.

The analysis made before he commenced on them showed specific gravity of 1036; sugar, eight per centum. Eight days later, after having taken four powders each day, there was a decrease of twenty-five per centum in the quantity of urine, and in this decreased quantity the sugar had decreased from eight to six per centum, and he was not disturbed during the night. After another week, the same dose of the drug caused another reduction of ten per centum in the quantity of urine,¹ and of sugar down to four per centum, and caused, besides, an inexplicable invigoration of the whole system, so that he ventured to, and was able to drive a spirited horse, which he would not have thought of attempting to do two weeks previous to that time. After a third week, the quantity of urine amounted to from thirty-five to fifty per centum of that passed before the medicine was taken, and the sugar in it to only three per centum.

No. 2. Gentleman, aet 47. Had diabetes for four years, but never very bad. He does not know how much sugar his urine contained during those years. He voided from five to seven pints in twenty-four hours, of a gravity of 1036. He suffered more from the inconvenience of keeping up a diabetic diet than from the symptoms of the disease, excepting the necessity of having to urinate two or three times during night. Before he commenced taking the drug, the gravity was 1036, the amount of sugar was six per centum. After three weeks, the specific gravity was reduced to 1030; the amount of sugar

to three per centum ; the quantity of urine to four pints, and for the first time in many years he passed a night without urinating. This patient had partaken of potatoes and sweet-meats during the latter two weeks. He likewise reports a marked improvement in his general feeling.

No. 3. A physician, in the prime of life, not a bad case of diabetes, of the intermittent kind. The urine passed during and after the hours of rest contained sugar amounting to four per centum, while that passed during and after the hours of bodily and mental activity and strain was free from sugar. The effect of the drug on this patient was the same as on the others ; the quantity of urine, its specific gravity and its percentage of sugar were constantly reduced. At one time he thought he had to reduce the daily dose of twenty grains of the drug to ten grains, for fear of reducing the quantity of urine too much.

The limited amount of the drug on hand permitted of no further experiments, but the uniformly favorable results induced the writer, several weeks ago, to send to London for a supply, which is now due and daily expected. He would have waited for its arrival, and perhaps investigated a little more, before communicating this limited experience, but the fact that he is soon to remove to and permanently locate at Los Angeles, California, prompts him to bring these limited experiments and their results to the knowledge of the medical profession, and to ask the members of it to continue the investigation, whenever an opportunity is offered.

The action of the drug seems to be direct on the nerve-centers, and if such is the case, its beneficial effects is probably not limited to diabetes mellitus. The seed and bark of the plant *Syzygium Jambolanum* were recommended. The writer had a sample of each ; of the bark he made a tincture,

tried it, but found its efficiency almost null. The seed, or fruit-stones, appear to be of a gum-resinous nature, and as the dose is small and the taste not disagreeable, he gave the powdered seed; the quantity on hand being too small to justify risky experiments of extracting them with various menstrua. When freshly pulverized, the seeds issue a delicate pepperlike flavor, to preserve which it may be advisable to dispense the powder in gelatine capsules.

The drug will be kept, after its arrival, at the store of Messrs. Vaughn & Sawyer, Apothecaries, 322 West Madison Street, Chicago.

REPORT OF CASE OF LEIO-MYOM OF VAGINA AND UTERUS. *By*
HENRY T. BYFORD, M. D., *Chicago.*

(Read before the Chicago Gynecological Society, 19th of June, 1885).

The patient was a widow, about 35 years old. She was married ten years without becoming pregnant. She had no decided symptoms of disease except an occasional backache and some leucorrhœa, and frequent menstruation. She was treated for uterine inflammation a short time previous to her husband's death, three years ago, without any tumor being discovered. Since then she has menstruated every two weeks and gives over-exertion at the time of his death as the cause. The flow lasted five days and each time nearly the same in quantity as the monthly flow always had been. Twelve years ago she noticed a tumor about the size of a hickory nut just inside of the vagina. This had since been steadily growing, until its protrusion from the vagina, about Jan. 12th, '85, and had caused her no trouble. Even at that time the pain was promptly relieved by two or three doses of an opiate administered by Dr. Doering, who first saw her. Within two or

three days, a black spot appeared upon its distal end. In a week's time the whole tumor was swollen, black and emitted a gangrenous odor. Being unable to persuade her to have the growth removed, I cauterized it every two days with strong carbolic or nitric acid, and surrounded it with cotton dipped in carbolated oil, but I did not succeed in preventing slight septicæmia. As the capsule sloughed off, and left healthy tissue underneath, I attempted to cut off the tumor gradually, by silver wire drawn tightly about its base, twisted as tightly each day as she could easily bear. After this cutting half way through, I found that the parts had united behind the advancing wire. Having thus accomplished no good except to contract the whole pedicle from about two inches to a little over one inch in diameter, I removed the wire and refused to do anything more for her until she consented to submit to an operation for its removal. A few days later I slowly crushed the tumor off under anæsthesia, and applied iron to the stump to check the oozing which occurred from innumerable points. Only one arteriole was found requiring ligation.

Upon examination of the uterus two weeks afterwards, the sound entered to a depth of three and one-half inches, turning a little toward her left side. Upon the right anterior corner of the uterus a protuberance about the size of a goose egg could be felt.

Her present general condition is good. She had an attack of menorrhagia a week after the operation, which was two weeks after previous menstrual period, and has had one every three weeks since. She is taking one-half fluid ounce each, of Squibbs' fluid extract of ergot, and extract. *gossypii radidis*. On examination, May 14th, the uterus seems a little smaller and menorrhagia not so profuse.

I note the following points of interest:

1. The occurrence of both tumors in the same person.

2. The slow growth of the vaginal tumor as compared with the uterine.

3. Sloughing of the capsule right after protrusion from the vagina without impairment of the vitality of the tumor proper.

4. Entire absence of sensitiveness to strong acids.

5. The production of a pedicle by ligation of the proximal end with a fine wire.

6. Sterility antedating the discovery of the uterine tumor.

7. The dating of the active growth of the tumor from the time of her husband's death.

8. The influence of ergot upon the uterine tumor.

125 State Street.

TOO-OFTEN FEEDING AS A CAUSE OF DISEASE IN INFANTS,
AND A PROTEST AGAINST ONE COW'S MILK. *By A. E.*
HOADLEY, M. D., Professor of Anatomy, Chicago College of
Physicians and Surgeons.

(Read before the Illinois State Medical Society, at Springfield, May 20th, 1885.)

In the first years of my practice I was sorely tried by that class of infantile maladies which depend upon improper food, artificial or natural, and improper feeding; which diseases constitute by far the greater number of affections from which infants suffer and die.

I lost confidence in therapeutics, as I could get but negative results; and the various kinds of food and schemes of feeding alike disappointed in the majority of the well-defined cases of indigestion or mal-assimilation, diarrhœa and vomiting. They continued to vomit, purge, pine and die, in spite of all the elaborate and scientific preparations, prepared in accordance with the most approved physiological laws. In looking over the ground, it did seem as though there could be nothing want-

ing to properly nourish, and that without disturbance, the little infant, who at birth was absolutely perfect and healthy.

Still something was wrong, so I began a systematic inquiry to discover the error, and I very soon found that there was great discrepancy of opinion as to how often a young infant should be fed. Some affirming that four times a day and once in the night was enough, while others advocated feeding often, claiming that a healthy baby would not take more nor oftener than it required. The weight of evidence was in favor of feeding a sick baby, and especially a baby troubled with vomiting, very often and in very small quantities, every one having a favorite combination of food and therapeutics. Here was the error then, and I have by years of patient attention to the subject, proved to my perfect satisfaction that too-often feeding is a greater cause of disease than improper food, and since I have been of that opinion, putting precept into practice, my confidence in therapeutics has been restored. I can now as surely get the desired results from medication when it is indicated, in the infant as in the adult. I said, too-often feeding; I do not by any means wish it to be understood that I am an advocate of long intervals between feeding. On the contrary, I believe the intervals should be as short as possible, allowing sufficient time for the perfect digestion of the previous meal. The time may vary according to the food employed and the quantities taken; but when the shortest time in which a meal can be digested is fixed upon, that should be the minimum interval of time allowed to elapse between feeding, allowing the infant to go a longer time if sleeping or quiet; but under no circumstances should it be allowed to partake of food oftener. Now, what is the common practice? In nine cases out of ten, a baby is nursed or fed every time it cries, even though the crying is induced by an already over-distended stomach.

Some babies save themselves from worse results by promptly vomiting the excess of milk, retaining sufficient to perfectly nourish them, and therefore thrive; while others develop a condition of indigestion amounting to positive dyspepsia, and food induces pain on entering the stomach. Gastro-enteritis, entero-colitis, and a large number of the wasting diseases are induced by this one thing of feeding an infant so often that it cannot digest its food, thus causing mal-assimilation and all of its baneful consequences. The larger number of the diseases thus produced can be cured by simply removing the cause; that is, feed at regular intervals, say once in two hours or longer, but in no case oftener. I have repeatedly seen infants with moderate vomiting and diarrhœa, recover from both promptly and without medicine of any kind from simply regulating the time of feeding without making any material change in the food. I will cite two cases out of many thus treated.

CASE 1ST Male baby, age three months. Well nourished and apparently perfect at birth. Mother's milk was found to be insufficient at the close of the second month. Cow's milk was added and occasionally some farinaceous diet, previous to which time the baby was nursing the breast almost incessantly; but as the milk was scanty there was no disturbance. With the addition of the new diet there came a disturbed condition of the bowels, consisting of frequent passages of undigested lumps of curd or caseine, some mucus, streaks of green, sometimes small, at others large and watery. Paregoric was used occasionally in suitable doses to control the diarrhœa. This condition continued with gradually increasing severity, until vomiting was added as a symptom of the deranged digestion.

At this time my attention was called to the case. The child had been vomiting for two days, and now had reached a point where it threw up everything that it took into its stom-

ach, and it would take anything with avidity that was offered to it. There was as yet no fever, but restlessness and a flabby and shrunk condition of the tissues.

The course of the disease thus far had been very gradual, and there was not as yet any lesion, no positive pathological condition, being simply a deranged function. To remove the cause would be to successfully treat the case.

"How often do you feed this baby?" I asked.

"I feed him all the time, you might say, for he is never quiet unless he is eating," was the answer.

I tested the cow's milk with litmus paper and found it sour, although it was just milked from a select cow kept in the city close at hand. Ordered two teaspoonfuls of lime water to be added, to neutralize the acidity of the milk, and that it be fed to the baby every two hours, and, under penalty, no oftener.

As might be expected, the first was vomited, and the little sufferer had no alternative but to thirst and starve and cry in consequence, for two long hours, when he was again fed three ounces of milk with two teaspoonfuls of lime water added. This was taken with relish, and retained for about one hour when a part of it came up. This was the last time the baby vomited, and in three days the passages were normal in all respects, and the baby was "the best natured little darling you ever saw."

Did the lime water do it? I think not, inasmuch as they had been using lime water all the day before, and for several days had been administering pepsin with a view to correct the already recognized condition of indigestion.

The lime water was discontinued, and its diet, consisting of cow's milk, crackers and oatmeal, with breast milk at night only, was continued under the new regulations, and the child has remained well until the present time, three months, and

has resumed its usual plumpness. In this case the mixed diet of sour cow's milk, etc., might be assigned as a good cause for the severe derangement of the stomach and bowels; but upon instituting regularity of feeding, the patient did well without change.

On the other hand, if the diet had been changed and the pernicious practice of feeding all the time continued, it is my conviction, derived from sad experience, that it would have been simply a question of constitutional strength against a constant irritant, assisted perhaps by therapeutics.

CASE 2ND. A fine healthy baby at birth, female, well developed and well nourished. The mother's milk came early and in abundance, and from ordinary examination seemed to be of excellent quality. The baby was inclined to worry some from the first; was supplied with this best of all nourishment in abundance, and nearly all the time, except when asleep, for the purpose of keeping it quiet. She would vomit a part of nearly every meal, and then nurse again. At the end of six weeks she began to have frequent bad passages from the bowels, which were followed by vomiting in good earnest, with straining and gagging and great distress. At this stage I prescribed that the baby be put to the breast once in two hours, and at first be allowed to take but a small quantity, and when vomiting ceased to take as much as she would, instructing the mother to take the baby away from the breast as soon as she began to play with it.

This baby recovered promptly, and in less than a week had forgotten its bad habits. These cases were thus treated for the purpose of demonstrating that too-often feeding was the cause of the attack and not because other remedies would not be serviceable. On the contrary, therapeutical agents give the most gratifying results when combined with the above plan of regular feeding.

In this connection I wish to enter a protest against the popular practice of recommending one cow's milk for babies. This may be judiciously done in the country, but in towns, and especially in the larger cities, there are so many objections to the practice that it is fraught with danger to the little ones.

The selection of the cow is rarely if ever made by the physician; he cannot devote the time necessary to inspect cow-sheds and cows and examine the milk and look for possible causes of irritation and infection; the selection is usually made without the advice of the physician, and when his attention is called to the fact, the following are some of the reasons why he should not assent: the cow may be too old or too young, may have been milked too long or not long enough, since she calved. This time should nearly correspond to the age of the child to be fed. The milk may be extremely rich in butter or casein or both, or very poor in these constituents, as cow's milk varies in its quality to a greater degree than human; or the milk may possess some peculiarity of its own, which will by slow degrees injure the child. Furthermore, the manner in which town-cows are kept and fed exerts a pernicious influence. They are usually fed all the available garbage, which is mostly rotten, and refuse of the kitchen, and still-slop, which is next to garbage in cheapness and only one degree less objectionable. They are, as a rule, kept in low, damp and dark sheds or stables, without exercise, from the time of heavy frosts in the fall until grass starts in the spring. A large proportion of them are not provided with hay or straw for bedding, or dry bedding of any kind. They are compelled to lie down in their own liquid excrement, in which their bags and teats macerate until they become covered with sores. The filth adheres to their bodies, except shoulders and back, forming a hard crust, which only falls off in the spring, taking the hair with it, leav-

ing the skin naked, which is frequently covered with little sores or marks where sores have been. Some of these poor animals can scarcely face the daylight when first turned out to graze, owing to their long confinement in the dark. They are so weak that it is with great difficulty that they can get up alone, and very frequently it becomes necessary to assist them to rise. They will tremble all over after walking a mile when they are first driven out to pasture. Still they will retain a fair degree of flesh, and there are but few deaths, their food being sufficient in amount but bad in quality. Is this condition of things conducive to the production of good, health-giving milk? I think not. On the contrary, I believe that milk from such sources has been the direct cause of irremediable disease. This condition of things is so common in large towns, that one cow's milk should be regarded with suspicion and not countenanced until it can prove a good character. In the summer-time, town-cows are over-worked, going to and from their pasture lands; and to compensate for the meagre supply of grass that prevails, they are fed as before on garbage and still-slop. As a result, they give sour milk the year around. The milk of stall-fed cows is apt to be acid in its reaction, but it is always markedly so from town-cows, unless they are fed exclusively on grass and that within easy distance.

On the other hand, it is only necessary to say that at the country milk dairies, the chief source of city supply, everything is done that will tend to the comfort and well-being of the cows. The dairy-men know very well that all extras are more than paid for by a greater yield of milk. The facilities for rapidly cooling and shipping the milk are perfect, so that towns and cities are supplied with morning's milk, which is produced under the most favorable circumstances, within two or three hours from the time it is milked. This milk is han-

dled in eight gallon cans. Each can-full represents the milk from eight or ten cows; the quality must therefore average good in all respects.

In about twenty tests made with litmus paper by myself, at various times, and of milk from different dealers, it has proved to be neutral in its reactions. Should there be one cow that produced poor milk, its influence could not be very detrimental to a child, if mixed with that of eight others. Again, the chances would be a hundred to one that it would not get the same cow's milk two days in succession. It is therefore impossible for any vice to be long continued through milk delivered from a country milk dairy, except that vice be derived from bad management in the care or transportation. The chances of such contamination are reduced to the minimum as compared with one cow's milk.

Every first-class milk peddler is willing to supply his customers with the unadulterated and unskimmed morning's milk for seven cents a quart. The night's milk, after suffering various degrees of skimming and the blue color removed by a small quantity of burnt sugar, is sold by the grocers for from two to five cents a quart.

QUADRUPLE PREGNANCY. *By* M. ARTHUR, M. D., *Waverly, Codington County, Dakota.*

I take pleasure in reporting a case of quadruple pregnancy that has terminated happily.

At six A. M., July 3rd, I was called to see Mrs. D. R. Barnett. I found her greatly enlarged, with extreme œdema of the feet and legs. Labor had commenced four hours before. Pains were frequent and regular, the os dilatable, with a vertex presenting, liquor *amni* had not passed. After rupturing the sac, labor progressed more rapidly, and about eight o'clock

a female child was born. The pains continuing, I examined again and discovered a breech presenting also in the unbroken sac; shortly after rupturing this a male babe was delivered. Much to my surprise the pains continued, and after caring for the second child I examined again, finding another vertex engaged and also in its own sac. This I could not rupture in the usual manner, with my finger, but had to use a pair of blunt scissors. In fifteen or twenty minutes, a second female babe was safely delivered. I thought surely this was enough, but no, the pains continued constant and strong. Thinking it must be the placenta, I cared for the third babe before examining. When I was ready, I discovered a second breech presentation, this also in its own sac. This sac I had to rupture as the previous one, with the scissors, on account of the toughness of the membrane. In about twenty minutes the second male, or fourth child, was delivered, but apparently dead and bloodless. However, after working over it for about ten minutes, respiration and circulation were well established. I delivered the placenta in fifteen or twenty minutes after the last child; it was in one piece and very large, although the union of four placentæ could be distinctly seen with their four cords attached.

The babes weighed in the afternoon of the same day twenty-one and a half pounds in all. The girls $5\frac{1}{4}$ pounds each and the boys $5\frac{1}{2}$ pounds each. The mother and children are all progressing finely at the present writing, the babes being nursed on the mixed plan.

The parents are Scotch, coming to this country three years ago. They have five children previous to the late addition, one of which is Dakota born. The lady is 35 or 36 years of age, medium size and has been robust.

EDITORIAL.

THE INTERNATIONAL MEDICAL CONGRESS OF 1887.

It is generally, if not universally, conceded that the prospect of having a successful congress of the medical profession in Washington in 1887 has been materially impaired.

At least three causes have contributed to this result.

The first, probably, rests with the original Committee of Arrangements, that did much of the work assigned to it remarkably well, when it is considered how great and how varied that work proved to be.

The original seven members of that committee, with the President of the American Medical Association added, making eight, were authorized by the American Medical Association when their appointment was made, to add to their number, in case the invitation which they were delegated to extend to the International Medical Congress that was about to convene in Copenhagen, should be accepted. The committee acted upon the authority which had been delegated to it, and added the names of many able and representative men in different sections of our country to the committee. Thus enlarged, the committee proceeded to make a preliminary schedule, which embraced the names of physicians eminent in the different departments to which they were assigned, many of that number having international reputations. Most, if not all, assigned to these positions accepted them, and began preparations for the work for which they were chosen. The

committee then issued the schedule, which it had arranged, just before the last annual meeting of the American Medical Association. As this Association had been recognized by the medical profession of America as its representative body, and it had been requested by eminent members of the profession of our country to ask, *on behalf of the medical profession of America*, that the next triennial International Medical Congress might be held in Washington, it was not unnatural that the Association expected that the Committee of Arrangements, that it had empowered to act, and for whose acts as its appointees it became in a measure responsible to the profession at large, to report to it, officially, the acceptance of the invitation that had been given. It was right that a report should be made to it of the work which had already been done by the committee, for its approval or modification, before distributing the schedule at home and abroad. No doubt that distribution was made with the best of intent, and in the belief of its correctness, but that it proved to be unfortunate and impolitic is more than likely.

Another mistake is believed to have been made by that committee in so limiting the number, in their additions to the original eight, that several important official positions had to be assigned to single individuals, when it is claimed that additional and equally eligible and equally capable men in the profession might have been added to the committee and assigned to some of the multiple offices given to a relatively large proportion of residents of the Atlantic slope of the Alleghanies. Whilst geographical considerations alone should not decide selections for representatives in a scientific body, yet as the invitation was that of the whole profession of America, the American Medical Association having only been asked to become sponsor for it, it was but right that due regard should

be had to locality after professional qualifications had been, first, duly considered. It is not improbable that more liberality of views in this respect on the part of a portion of the committee, would have secured more harmony and more cordial coöperation. However, the fact should be kept prominent that the contemplated congress is designed to be, as all its predecessors have been, international in its broadest sense. Although the medical profession of America and, as representing it, the American Medical Association, stand as sponsors for the next congress, and, in a certain sense, as host for the foreign members who have been invited, yet all the arrangements should be catholic, in the best sense of that term, and that in no sense can the congress be, nor should it be, controlled either by the American Medical Association or by the medical profession of America.

The next mistake was made by the American Medical Association at its meeting in New Orleans. Whilst granting to it the right to review, to criticize and even to amend the acts of the committee that it had created and empowered to act for it, and granting still further that it had a right to add to its committee, it is not clear on what grounds it ignored the right of the original committee of eight to add to its number, after having distinctly authorized such addition at its annual meeting the year before. It did not claim that the members added by the committee of eight were not capable and representative men, but it made the unfortunate and impolitic mistake of introducing a local ethical question into an international scientific body, that ignores all such questions, and places science and philanthropy above and beyond ethical creeds.

This led to the result that able and representative men were deposed, and even if their places have been filled by equally capable men, the effect upon the prospects of the congress

has been very serious. It enlarged its committee of arrangements—a privilege that, it is conceded, it had a right to exercise—but at the same time it eliminated from that committee those members whom the original committee of eight had, by the authority conferred upon it, added to its number, and who thereby became as much a part of the committee of arrangements as the original eight members themselves. This was unnecessary, unjust, and wrong, and it is but charitable to suppose that in the haste and the heat of discussion, the wrong was, unintentionally and without due thought, committed. If so, the mistake should be corrected by inviting those so excluded to resume their places with the other members of the committee, which should then consist of the original eight, the members that those eight added to their number, and the additional members which the association selected at New Orleans. It is true that some of the original eight have resigned the task they had undertaken. Under all the circumstances it may not have been unnatural that they should have done so, viewing matters from the stand-point of self; but in view of the fact that they presented the invitation that was accepted; that they pledged the best efforts of the profession of America to make a success of the next congress, from a professional, a scientific and a social stand-point, they should not have been among the first to abandon their posts. They should be invited to resume their places on the committee, and they should accede to that request. The question is no longer one of personal preference or personal taste. Our faith as a profession has been pledged, and we are in honor bound to make good our pledge. We have a right to expect that those who were foremost in asking the medical profession of the world to come to our shores will not be foremost in abandoning their posts of trust, because others, as well as them-

selves, have made mistakes. That some unfortunate selections have been made by the American Medical Association is apparent, but it is as true as ever, that two wrongs never make one right.

The third contributing cause seems to lie with the committee of arrangements, as at present constituted.

The persistency with which, it is alleged, it thrusts the question of local professional ethics forward, is alienating the foreign members of our profession whom we have hoped to see among us, but who are declaring that they see, in this most injudicious wrangling, evident signs of failure of the congress, unless this discord should end and the course be adhered to which has characterized each congress that has so far been held.

Although but one meeting of that committee has been held, and the details of its future plans have not been fully announced, yet such intimations have gone forth as to have had a very unfortunate effect upon a large proportion of prominent men in the profession in our country, who by their hasty and, perhaps, injudicious course are further embarrassing an honest effort on the part of the mass of the profession to make good the faith pledged at Copenhagen, and to save the good name of our country from the disgrace, and to avert the obloquy which failure to meet the expectations that we have raised abroad must bring. It seems incomprehensible that men, who have fairly won distinction in the profession of medicine, should be found banding themselves together in a manner suggestive of trades-unions, and placing impediments in the way of making a success of a scientific and philanthropic congress. Most careful sifting for reasons for such course fails to discover other than the fact that the American Medical Association has exercised a right, that it clearly possessed, to revise the work

of its committee; that it did it in an obnoxious way; that it thrust and, through its committee, it continues to thrust, a question of local professional ethics into a scientific body, to its great detriment, and that it has placed in prominent official positions a few men whom the profession of the country are unwilling to regard as representative, and who are obnoxious to, at least, one of the factions in this unseemly wrangle.

If, for argument's sake, it be granted that these positions were well taken, does it follow that the course taken by these disaffected members of the profession is justifiable or that it will bear reflection. Can they, for such reasons, afford to invite disaster in a cause in which the good name of the medical profession of our country is involved? Would it not be much more to their credit that they should be found in the ranks, striving to preserve our name untarnished, rather than to be surrendering the field, at the first skirmish, to those whom they are unwilling to acknowledge as their peers?

The only practicable solution of this most unfortunate dilemma seems to lie in an abandonment of a rule-or-ruin policy, and recognition of the mistakes made. This would prepare a way for honorable compromise and bringing together all who have been appointed to arrange the preliminaries essential to the proper opening of the Congress.

Good faith requires that an honest effort should be made to do the best that is possible, under these embarrassing circumstances, to make a success of the proposed congress. If failure and disgrace result, let the responsibility rest where it properly belongs, and let it be admitted that American physicians showed their lack of capacity to make good their promise, and to organize a congress, after having repeatedly expressed a desire to have their country honored by selecting

it as a place for its meeting, and after having extended a formal invitation and having had it accepted.

Then let the shame be confessed, and, in fitting acknowledgement of their unworthiness to participate, let Americans, thereafter, absent themselves from every international medical congress that may be held.

EX PEDE HERCULEM.

That was an exceedingly dull person, says DR. HOLMES, who made the remark, *Ex pede Herculem*. He might as well have said, "From a peck of apples you may judge of the barrel." We are told that CUVIER constructed a megatherium from a tooth, that LEIDY and AGASSIZ drew portraits of undiscovered fishes from scales. An interesting psychological problem is presented to us by an editorial, entitled, THE RUMP CONGRESS OF 1887, appearing in *The New York Medical Journal*, of 11th July, 1885, and containing statements, which deserve to be recorded, as revealing the animus of the *Journal's* action with reference to the NINTH INTERNATIONAL MEDICAL CONGRESS. An extract of the editorial reads as follows:

"And all this disgrace is the logical outcome of the false and artificial issues which for the past three years have enabled men in no way representative of the profession to masquerade as its leaders, through the medium of that degenerate and utterly ridiculous concern, the American Medical Association. That organization long ago ceased to work for the benefit of the profession, and for a number of years past its annual meetings have been little more than sources of the most shameless intrigue and demagogism."

It is the old story of "No case; abuse the plaintiff's attorney."

Of the actual facts involved in the case, our esteemed con-

temporary ought to be fully cognizant. If he is not, his attention is invited to an editorial, appearing in *The Journal of the American Medical Association*, 25th July, 1885, which states three important truths, which must be clearly and distinctly borne in mind.

“(a.) That the American Medical Association is the only organized representative of all departments of the profession in the United States; (b) that the Committee of Invitation with all its powers and duties was simply the instrument or agent appointed by the Association to perform certain acts or duties; and (c) having appointed such agent and invested it with certain important powers, the Association was, by the fundamental principles of parliamentary law as well as by the dictates of common sense, itself responsible to the medical world, both for the character of the agent or committee, and the manner in which it should discharge its duties.”

Possibly, while our valued *confrère* has been in possession of the actual facts involved in the case, he has been unable to arrive at a logical conclusion.

In such event, it is suggested that the study of PROFESSOR JEVONS's excellent little treatise on “*The Necessary Laws of Thought*” might be attended with benefit to himself, and advantage to his readers. It seems probable, however, that the pitiful begging of the question upon the part of the *New York Medical Journal* is not due to ignorance of the facts involved, nor to the incorrect application of logical processes.

In seeking a solution of the problem, may not the following words of a great physician, and a shrewd observer of men, throw some light on the subject:

“A mixture of a life doth ever add pleasure. Doth any man doubt, that if there were taken out of men's minds vain opinions, flattering hopes, false valuations, imaginations as one

would, and the like, but it would leave the minds of a number of men poor shrunken things, full of melancholy and indisposition, and displeasing to themselves."

Whatever the motive of our journalistic brother may have been,—whether ignorance of the facts involved in the case, defective knowledge of logical processes, or that unfortunate moral obliquity, consisting in incorrespondence of the subjective with the objective order of the phenomena,—his temerity, in deliberately offering insult to every member of the American Medical Association excites surprise.

As a commercial venture,—and we are compelled by the *Journal's* open advocacy of the propriety of consultation with irregular practitioners, that considerations of pecuniary return constitute the basis of professional ethics,—it must prove a failure. Neither will the imposing publishing house of Bond street, nor its exponent, the *Journal*, reap material reward. Surely, every member of the American Medical Association will bear this sentence in mind, in the future, remembering the words of O. W. Holmes, that "As the 'O' revealed Giotto,—as the one word '*moi*' betrayed the Stratford-atte-Bowe-taught Anglais,—so all a man's antecedents and possibilities are summed up in a single utterance which gives at once the gauge of his education and his mental organization."

DOMESTIC CORRESPONDENCE.

TO THE EDITORS OF THE *Chicago Medical Journal and Examiner*.

Gentlemen :

In a late visit to an old New England town, I came across this letter, which you see takes us back a hundred years.

It was in possession of Dr. W. G. Perry, whose family has been known in the medical profession since 1815. His father, now at the advanced age of ninety-six, is the oldest living graduate of Harvard University, and has practiced in Exeter, New Hampshire, for more than sixty years.

Thinking that these words, coming to us from other generations, about one of our most valued medicines, might not be uninteresting to your readers, I place them at your disposal.

Respectfully,

CHAS. GILMAN SMITH, M.D.

125 State Street.

DIGITALIS.

BIRMINGHAM, 27th, Oct., 1786.

Sir :

Your letter of February 9th, arrived here in due time, and the seed of the *Digitalis purpurea* which accompanies this, will show that I have not been inattentive to your request. I send much more than will be necessary for your own use, in the

hope that you will distribute it into other provinces, and you can transmit some to my friend S. Jones in Virginia for the same purpose. Mr. Cutler, in the memoirs of the American Academy of Arts and Sciences, printed at Boston 1785 and now before me, gives in his account of indigenous American vegetables, page 465, the Linnæan character of the *Digitalis purpurea* and supposes it a native of that part of America; but I have reason to believe that his species is not the *purpurea*. Perhaps you may have an opportunity of sending him a few of these seeds and please to mention my suspicion to him.

It has been remarked that in cold countries the sedentary and the intemperate are particularly the victims of disease, and the diseases which attack them are I think mostly such as arise from debility. If the kind of them you mention be really more unwholesome than that we have from the West Indies, it must be from some combination with the ardent spirit, though I am inclined to suspect that the intemperate use of Spirits, as such, will occasion the disorders you mention. If, however, the New Rum distilled from the molasses be, as you believe, more deleterious than such as we use, and that deleterious quality abates by keeping, we must suppose its melioration is caused by the separation of the hurtful impregnation. The noxious part I believe to be sometimes Lead, and sometimes an essential oil. The oil escapes in time, and I know the Lead will be precipitated by the astringent extract the spirit gets from the casks, but I never have been satisfied whether the Lead is held in solution by an oil or an acid; probably by the latter, for we find the corks of Rum bottles become rotten. If you suppose, with me, either with or without glandular disease in the abdomen, may be caused by want of action in the absorbent vessels and too great laxity in the exhalants you will readily conceive how the inaction

must follow the repeated use of strong stimulants, such as ardent spirits, essential oils, or both combined. Nor will you be at a loss to judge why a cold climate and an inactive life should aid the formation of the disease. I should attempt in your dropsies to evacuate the water by the Digitalis and to prevent its repeated aggregation by frictions, exercise, flannel shirts, and other warm clothing, and should also call in the aid of aromatics, steel, and sometimes mercury.

I am more and more convinced that the Digitalis, under a judicious management, is one of the mildest and safest medicines we have, as well as one of the most efficacious. It is, I believe, *never* necessary to create nausea or any other disturbance in the system. I never now use more than $\mathfrak{z}\mathfrak{i}$ $\mathfrak{f}\mathfrak{z}\mathfrak{i}$ to $\mathfrak{f}\mathfrak{z}\mathfrak{ss}$ of infusion and in substance rarely exceed 3 grains in 24 hours.

An account of your tryals with this medicine will be highly grateful to me, and fully recompense any trouble you have given me.

The experiments in the freezing of Quick silver were extremely well conducted, and correspond sufficiently with the most accurate accounts we have had from other quarters. I read them to a Society of Philosophic friends in the place, and they met the approbation of all. Reason and Philosophy are making rapid strides in every quarter of the globe to emancipate and to enlighten mankind. We cure our Intermittents of every kind by a solution of white Arsenic in water, 1 grain to $\mathfrak{z}\mathfrak{i}$; dose, 25 or 30 drops, 3 times a day, in 6 or 8 ounces of Gruel or Barley water. In or out of the paroxysms we go on, until the disease is stopped. The cure is then to be finished with the usual tonics. Under proper management it produces no sensible effects.

I must beg you to accept my grateful thanks for the opin-

ion you are pleased to entertain of me, and to believe me that no one is more happy to promote the spread of science than your obliged and very,

Obdt! Servt!

W. WITHERING.

The new Botan. arrangement will not be out sooner than the beginning of next summer. Digitalis has cured two other cases of insanity in this neighborhood and 3 cases of Haemoptoe. The latter were of the kind attended with a quick bounding pulse, and I directed the medicine from the quality I knew it possessed of abating the action of the heart.

SOCIETY REPORTS.

TRANSACTIONS OF THE CHICAGO GYNECOLOGICAL SOCIETY.

Regular Meeting, Friday Evening, 19th June, 1885. THE PRESIDENT, DR. H. P. MERRIMAN, in the chair.

I. ETHERIDGE. A Report of a Case of a Fœtus, Enclosed In Its Sister's Placenta. *Fœtus Compressus. Fœtus Papyraceus.*

II. BYFORD. A Report of a Case of Leio-myom of the Vagina and Uterus.

I. PROFESSOR J. H. ETHERIDGE read A REPORT OF A CASE OF A FŒTUS ENCLOSED IN ITS SISTER'S PLACENTA. (*Fœtus Compressus. Fœtus Papyraceus.*) With exhibition of the specimen.

On 26th September, 1882, Mrs. T. J. B., 22 years old, of a nervous sanguine temperament, healthy, was delivered of a mature female child, after a normal labour of four hours duration.

During the delivery of the placenta, some abnormality was detectable, which proved to be a *fœtus papyraceus*.

THE OUTER SURFACE OF THE PLACENTA.

The outer surface of the placenta at once arrests attention. A deep furrow separates the two placentæ, which are united, on their amniotic surface, by a series of compact white bands, discoverable only by pressing through the furrow. The large placenta constitutes about two-thirds of the entire mass. The smaller placenta is thin, flat and compact, being about one-third as thick as the larger one.

The placenta of the living child is normal throughout its extent. Cotyledons are well marked, the tufts and villi pre-

senting normal microscopical characters. The placenta of the *fœtus compressus*, in about nine-tenths of its extent, is whitish-yellow, and very firm. The whole thickness of this portion of the placenta, excepting its amniotic surface, presents one unbroken mass of fatty degeneration. The remaining one-tenth of the placenta presents a carneous appearance, evidently a transition stage between normal placenta and complete fatty destruction. Its cotyledons are enmassed and its tufts and villi solidified and the whole is interspersed with initial fatty depositions.

THE FŒTAL SURFACE OF PLACENTA.

The two segments were wholly different at time of birth. The placenta of the living child presented a normal appearance. The placenta of the *fœtus papyraceus* presented the appearance of a closed bladder, which, upon examination, was found to be an unruptured amnion, containing amniotic fluid and a fœtus. The development of the *fœtus compressus* corresponded to the third month. The cord of the *fœtus papyraceus* was ten cm. longer than that of its fellow, and much thinner. The cord was inserted into the margin of the placenta, near the fully developed organ.

PATHOLOGY.

Among the causes, producing the death of the fœtus, the following may be mentioned :

1. Faulty insertion of the cord, at the margin of the placenta, adjoining its fellow. (Kieselhausen).
2. Faulty structure of the cord ; thin, twisted, or deficient in the jelly of Wharton. (C. Braun).
3. Disease of the placenta.
4. Traumatism.
5. The implanting of the umbilical vessels too closely together, and arterial anastomosis.

LITERATURE.

Fœtus papyraceus is of seldom occurrence. A search through the library of the Surgeon General's office at Washington resulted in finding only five references to reports of similar cases.

DISCUSSION.

DR. PHILIP ADOLPHUS thought that such cases were of more frequent occurrence than the remarks of the author of the paper would lead one to believe. In twin pregnancy, the death of one fœtus before parturition was not infrequent.

PROFESSOR W. W. JAGGARD agreed with Dr. Adolphus that while such cases were rare, a more extended research into the literature of the subject would have revealed a much larger number of cases.

While it was true that American and English text-books usually merely mentioned the fact of occurrence, German, French and Italian treatises devote a chapter to the subject. The last edition of SCHROEDER contained an excellent *résumé* of the literature. The case, reported and exhibited by Professor Etheridge, resembled in many points the case in the Pathological Museum of the Jena Lying-in Hospital, fully described by B. S. SCHULTZE. This specimen showed the placenta of a mature fœtus, and adjoining it a second egg, corresponding to the sixth week of pregnancy, with its own decidua and unruptured amnion.

Professor Etheridge's case was chiefly interesting, as bearing upon a subject of theoretical importance, *i. e.*, superfecundation, and superfœtation.

On *à priori* grounds, it was possible that superfœtation could occur as late as the twelfth week of pregnancy,—when *decidua vera* and *reflexa* became united. Up to this time, it was possible that egg and spermatozoid might come in contact.

Superfœtation was also possible in cases of double uteri. Up to the present time, however, no case has been recorded which does not admit of a simpler explanation.

There exists a great weight of evidence in favor of superfecundation. Mares give birth simultaneously to horse and mule foals; bitches, running during the period of rut with different breeds of dogs, throw young of different, so-called bastard forms, corresponding to the breeds of the male progenitors; the same is true of cats.

A woman may give birth to twins, one of which is white, one black.

The latter fact, however, does not necessarily demand for its explanation intercourse at or near the same time with a white and a black man, since in crossing races, the offspring may resemble either father or mother, or one child may resemble the male, the other the female progenitor.

There could be no reasonable doubt as to the accuracy of Professor Etheridge's diagnosis.

DR. JOHN BARTLETT had seen one case of *fœtus compressus*, in the CHICAGO WOMAN'S HOSPITAL, about four years ago. One fœtus was mature, the other corresponded in development to the fifth month of pregnancy.

DR. BARTLETT referred to the contribution of SMELLIE and MAURICEAU upon the subject.

DR. EDWARD WARREN SAWYER referred to the fact that in ectopic pregnancy no compression of the fœtus was observed. He alluded to a case, in which he performed laparotomy three and one half years ago. The fœtus weighed eight pounds.

There could be no question about superfœtation in Professor Etheridge's case.

Fœtation, by inclusion, might be considered as explanatory of many of the monstrosities which are so commonly seen.

PROFESSOR DANIEL T. NELSON thought it would be interesting to know how much force was necessary to compress the fœtus as in Professor Etheridge's specimen. He referred to the experiments of Professor Park, of the Massachusetts Agricultural College, in the determination of the expansile force of growing squashes and pumpkins.

THE PRESIDENT wished to know whether the death of the fœtus occurred before compression, or whether it resulted from that factor. The marginal insertion of the cord doubtless was an important etiological agent. When the uterus was in the pelvic cavity, compression was greater.

He referred to the fact that in twin pregnancies, it was unusual to find both children equally developed, and frequently the birth of one preceded that of the other by minutes, hours and even days.

II. DR. HENRY T. BYFORD read A REPORT OF A CASE OF LEIO-MYOM OF THE VAGINA AND UTERUS.

The patient was a widow, about thirty-five years old. She had been married ten years, without becoming pregnant.

She had no decided symptoms of disease except an occasional back-ache, some leucorrhœa. She was treated for uterine inflammation three years before, and no tumour was discovered. Since that time, she has menstruated every two weeks. Catamenia usually lasted five days, and were normal as to quantity.

Twelve years ago, she noticed a tumour about the size of a hickory nut just within the vagina. This swelling had since that time grown steadily, until its protrusion from the vagina, about 12th of Jan., 1885, caused great inconvenience. Even at that time, the pain was promptly relieved by an opiate, administered by Dr. Doering. Two or three days subsequently, the tumor became black, swollen, and emitted a gangrenous

odor. Slight septicæmia followed cauterization with nitric and carbolic acids. The tumour was attached to the anterior wall of the vagina.

The tumour was subsequently crushed off, and the patient recovered. Indagation revealed a protuberance, about the size of a goose egg, upon the right anterior surface of the uterus, which was apparently a leio-myom.

The following points of interest are to be noted in connection with the case :

1. The occurrence of both tumours in the same person.
2. The slow growth of the vaginal as compared with the uterine tumour.
3. Sloughing of the capsule, immediately after protrusion from the vagina, without impairment of the vitality of the tumour, proper.
4. Entire absence of sensitiveness to strong acids.
5. The production of a pedicle by ligaturing the proximal end with a fine wire.
6. Sterility, antedating the discovery of the uterine tumour.
7. The influence of ergot upon the uterine tumour.

DISCUSSION.

DR. EDWARD WARREN SAWYER thought the locality of the vaginal tumour was interesting but not unusual.

PROFESSOR DANIEL T. NELSON inquired whether or no fibroid tumours occurred by preference in the anterior vaginal wall.

He thought, as regards the operation, an elliptical incision around the base, and enucleation of the tumour, would have fulfilled the indications equally well.

The Society then adjourned.

W. W. JAGGARD, M. D.,

Editor.

2330 Indiana Ave., 24th July, 1885.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, July 20, 1885, S. J. JONES, Chairman, pro tem.

PROFESSOR W. E. CASSELBERRY read an interesting paper detailing the surgical procedures in a case of membranous occlusion of the posterior nares. His patient was aged about fifty, a native of Russian Poland, and had suffered from obstruction of the left nasal chamber for the last thirteen years. Thick, viscid and foul muco-purulent crusts accumulated in the nares and naso-pharyngeal space which he could neither expectorate nor expel through the nose on account of the impenetrability of the nostril to currents of air. Partial occlusion, also, of the right nasal chamber necessitated frequent and prolonged mouth-breathing, and consequently he has suffered from atrophic pharyngitis and laryngitis, with painful deglutition, cough, suffocative paroxysms, etc. Deafness in the left ear and annoying *tinnitus aurium* have long been prominent symptoms. Most violent paroxysmal headaches, constant soreness on the top of the head, vertigo, especially upon stooping, and various indescribable cephalic sensations of a most distressing character, have served to render life miserable.

By a rhinoscopic examination the pharynx was seen to be covered with a foul, viscid, muco-purulent substance, continuous in descent from the naso-pharyngeal space, and imparting to the expired air a disgustingly fetid odor. The naso-pharynx was filled with rotten crusts which necessitated removal for further inspection of the parts. Having thoroughly cleansed the parts and accustomed the patient to instrumental manipulation, by using Voltolini's uvula holder, a good rhinoscopic image was obtained. All previous efforts to pass a probe from in front had failed, and passing the finger behind the

palate through the mouth, an obstruction was encountered. The rhinoscopic image revealed a tense membrane covering the left choana almost completely. Its free edge was thin and sharp and approached so near to the septum, that only a small slit or opening remained between it and the septum narium. The left ostium tubæ could not be seen, the membrane evidently lying behind the Eustachian orifice, and so intercepting its image. On passing a probe between the membrane and septum the edge of the membrane could be pushed backward. It felt tense and was from one to two millimeters in thickness.

The right choana was partially covered by a membrane extending half across the aperture and intercepting the view of the superior and outer half of the middle turbinated bodies, and the right ostium tubæ. This membrane was much thicker and less tense than that on the left side.

In order to prepare the patient for treatment, he was trained daily for one week in the introduction of mirrors and instruments. A flexible silver probe was bent, after many trials, to exactly the proper curve to pass readily by way of the mouth and naso-pharynx into the opening on the left side and to pick up the membrane. A straight knife-electrode was then made to conform to the same curve, and lastly, this instrument, with the attachments complete, made several trial trips to the desired locality. All being in readiness, December 13, 1884, the knife-electrode was introduced through the opening between the membrane and septum and its edge pressed backwards against the membrane. At this moment the patient retracted the soft palate and shut off all vision. But, thanks to previous training, when instructed to relax all the parts the velum fell and the rhinoscopic image was perfect. Having adjusted the electrode properly the current was turned on, the knife end became red hot in an instant and the membrane was incised

without bleeding, and without sufficient pain to cause the patient to wince. In another instant the current was broken, the electrode cooled in a few seconds and was withdrawn. An examination revealed that the work had been wonderfully efficient. The membrane having been tense, when it was incised, each part retracted leaving an opening sufficiently large to bring into view the middle and inferior turbinated bodies, and to the delight of the patient to allow a free passage of air through the left nostril, and from that moment he has had none of the distressing cephalic symptoms mentioned. The floor of the nose, the septum and the turbinated bodies were thickly incrustated with horribly fetid, cheesy masses, decomposed and desicated secretions accumulated for years, which were removed with great difficulty. The catarrhal symptoms then gradually became less distressing. After two similar operations the left ostium tubæ became visible in the rhinoscopic mirror, and two or three touches with the knife served to entirely obliterate the membrane. Four similar operations served to obliterate the membrane in the right side, and now both posterior nares are widely patent and in an approximately natural condition.

It is probable that atresia of the posterior nares is by no means so rare as the few reported cases and the omission of all mention in many treatises might lead us to suppose. The reporter had seen reports of two cases only occurring in the adult, one by Voltolini and another by Pomeroy. Records of cases occurring in infancy are more common, doubtless because the nursing function necessitates either a correct diagnosis and operation for relief, or death ensues and an opportunity for a postmortem examination. Reports of such cases are recorded by Ronaldson, Luschka, Betts, Cohen and Emmerts. In all these cases the malformation was congeni-

tal and it was probably so in the case above reported. This patient has never suffered from any illness which would act as a cause for the development of such a membrane. It may be possible that in earlier years the membrane was relaxed and less complete, similar to the condition found on the right side, and later it underwent contraction, became thinner, more tense and sufficiently extended to cover the choana. The left membrane was composed chiefly of a reduplication of mucous membrane, with possibly some connective tissue and muscular fibres interlying in the thicker portion toward the outer border. The right structure contained considerable muscular tissue. There was no osseous malformation. Upon the left, the attachments were, apparently, to the mucous lining of the superior posterior edge of the vomer, the inferior surface of the body of the sphenoid bone, the left pharyngeal wall behind the Eustachian orifice and the superior posterior surface of the velum palati. Upon the right the attachments included only the inferior surface of the body of the Sphenoid, and the right pharyngeal wall behind the Eustachian orifice.

The galvano-cautery is more useful in such operations because it is a dull instrument; can be introduced or withdrawn without harm; can be used when applied to the proper place, and almost no bleeding or pain ensues.

The society adjourned after the paper was read and Professor Casselberry had exhibited a Fleming galvano-cautery battery with electrodes—as modified by Dr. Carl Seiler.

SANITARY CONVENTION AT YPSILANTI, MICHIGAN.

[Reported for the CHICAGO MEDICAL JOURNAL AND EXAMINER.]

Great interest was manifested in the Ypsilanti Sanitary Convention, which was held June 30th and July 1st, 1885, under the auspices of the Michigan State Board of Health. The physicians of Ypsilanti, the professors of the State Normal School, and a large number of other prominent citizens of that place were in constant attendance. About twenty physicians and health officers from other places were also in attendance.

C. L. Yost, Mayor of the city, opened the convention with a brief address of welcome, in which he said that "in times past we have been honored with the presence of other assemblages for consultation upon religious, political, medical or other interests; but this is the first time that disinterested philanthropists have come to us to discuss those great practical questions relating to the guardianship of public health." He thought that the adage, "an ounce of prevention is worth a pound of cure," was the inspiring motive that brought them together. Their city was more than usually blessed with conditions for good health; still they recognized the value of detailed instruction in sanitary subjects. Sanitary science is in its infancy, and all attempts to further it and bring intelligent attention to its teachings should be welcomed by thinking men everywhere.

Edwin Willits, President of the Michigan State Agricultural College, presided over the convention; and in his address dwelt upon the value of human life considered from an economic standpoint as worked out by eminent statisticians. A number of people who should produce \$3,000,000 when in good health, could produce when not in good health only \$2,000,000. Here is a loss of one-third, much of which could

be saved by applying the simplest sanitary precautions. It is the duty of a community to keep these human earning-machines in good condition of health or earning-capacity, even from economical motives. A community has the legal right to do this. We want pure water and plenty of it, clean streets, cleansed sewers and drains, swamps drained, cesspools filled up; and we should not count the cost on our fingers. The crowning labor of our medical science is the warding off of disease. Given by heredity a sound constitution, pure air, pure water and nutritious food ought to guarantee to every human being, as he puts his foot on this earth, his three score years and ten, with which assurance he might plan the labors of a well-rounded life.

Rev. Dr. Woodruff, of Ypsilanti, read a paper on "The Moral Effect of Sanitation." He told of the importance the ancient Jewish people gave to sanitation; and in a forcible way pointed out its power in elevating man morally as well as socially and physically. He thought the present attention given to sanitary matters is not temporary. The reform has come to stay.

Prof. Austin George, of the State Normal School, spoke on "Sanitary Needs of School Buildings and Grounds." 1. School site should be on gravelly soil, a natural knoll, admitting thorough drainage; 2. Wells should not be nearer than 100 feet to the outhouses; 3. Basements should be high, with free circulation of air under ground floors. School rooms should contain 250 cubic feet of air space for each child. The light should come in over the left shoulder. The windows should go to the ceiling, and within three and one-half feet of the floor. The blackboard should be on the side of the room opposite the windows, and never have a glossy surface; 4. The simplest heating and ventilating apparatus is the hot-air

furnace, and for small buildings the jacketed stove. The foul air outlets should be ample, and at the floor level. With any system, the rooms should be frequently flushed with fresh air through windows and doors. The temperature should be kept at 70° Fahr., not by teachers' sensations, but by thermometers ; 5. Perfect desks and benches, not yet made ; they should be adjustable, to suit different sizes, and be constructed with reference to the curves of the body. There should be foot-rests which could be raised or lowered until each pupil is made comfortable and able to take a healthful position. Many spinal complaints and pulmonary diseases are produced by improper desks ; 6. Means for drying wet wraps should be provided ; 7. Precautions against fire should be had, especially in the heating apparatus and the chimney ; 8. "Inasmuch as the state educates the children, and compels their attendance in public buildings, the state should see that the children are not subjected to any preventable cause of disease."

This paper called out a long discussion, participated in by Dr. Avery, of Greenville, President of the State Board of Health ; Prof. Vaughan, of Ann Arbor, member of the State Board of Health ; Prof. McLouth of the State Agricultural College ; Prof. Langley, of the Michigan University, and many others.

Dr. Bion Whelan, of Hillsdale, Mich., spoke on "Sanitation in Small Cities." The water supply should be guarded from contamination from cesspools and vaults. If we could not have sewers, the most feasible plan for disposing of garbage is to divide the city into districts and have it removed by licensed scavengers. Sanitary science should be taught in schools. The women should be taught sanitary needs, as much of sanitary work falls upon them. The nature of contagious diseases, and means for their restriction should be known by all.

Dr. J. H. Kellogg, of Battle Creek, member of the State Board of Health, treated of the "Disposal of Slops and Garbage," illustrating his remarks by use of the blackboard. He pictured in a graphic way the ordinary condition of back yards, as contrasted with front yards. He prefaced his subject proper with a brief description of bacteria and other low forms of microscopic life, and showed the relation of these to decay, no decay being possible without their intervention. He showed the importance and usefulness of certain sorts; the dangerous nature of others. He spoke of flies in relation to filth. They are a very strong indication of the presence of filth, and consequently of germs, and it is even believed that the germs of certain diseases may be spread by them. Whenever a house is full of flies, you may be certain that slops or garbage of some sort has been allowed to accumulate about the premises. He stated that the air about cesspools, foul drains and other filthy places is usually swarming with micro-organisms, and he believed that even if such germs were not the direct cause of certain diseases, the continual breathing of such air predisposes thereto. All sources of filth should be carefully and speedily removed from the habitation and its vicinity. Garbage can be reduced to a minimum by a little attention to domestic economy. Much food that becomes garbage through carelessness could be turned to good use if not neglected. Even after due care, however, some refuse will remain. So far as possible this should be burned. That is the best method of disposal. Where it is impracticable, a water-tight covered receptacle can be used for receiving such refuse, which should be removed frequently by a paid scavenger or otherwise. Slops should not be thrown upon the ground, into open drains or into cesspools in the yard. He had known of frequent instances in which wells and cisterns were contaminated from

the seepage of foul privies, drains and cesspools. If slops must be poured on the ground, set off a portion of the back end of the garden, and distribute the slops on different parts of it on alternate days, giving in this way some opportunity for the soil to oxidize the organic matter. Slops containing excreta from contagious diseases should be thoroughly disinfected.

Chas. R. Whitman, of Ypsilanti, one of the regents of the Michigan University, read a paper on the "Limitations and Duties of Local Boards of Health." The powers and duties of local boards of health should be as follows:

1. To ascertain the causes of sickness and of death, and from time to time the prevailing diseases among all classes;
2. To prevent or mitigate diseases, especially zymotic or epidemic, endemic and contagious diseases;
3. To effect the periodical or special vaccination of the inhabitants;
4. To ascertain, prevent and remove or abate nuisances dangerous to public health;
5. To prevent the introduction of malignant, infectious or contagious diseases, and to isolate persons afflicted or believed to be afflicted with such diseases;
6. To establish, locate and manage hospitals for persons having contagious diseases;
7. To prevent the sale of any article for food or drink which is unwholesome;
8. To enforce these regulations by a sufficient penalty.

Mr. Whitman said that the radical defect in the law defining the powers and duties of local boards of health is the lack of a general law forbidding evils and imposing penalties. Such a law should be enacted, and it should be as sweeping and as readily enforced as is the criminal law. He thought that the

subject of sanitation should become one of education in the schools, so that the future citizen, architect, and physician may be instructed in the principles of sanitation.

After a thorough discussion of this paper, participated in by Professor A. B. Palmer, of the University of Michigan, and many others, it was voted that Mr. Whitman be requested to draw a bill suitable for presentation to the legislature, framed to cover the question under discussion, and suited to correct existing defects in the present law. The bill is to be published in the proceedings of this convention.

Dr. A. F. Kinne, in a paper on "Sources of Malaria in Ypsilanti," took the ground that malaria is caused by a malarial germ native in certain soils and waters. Boards of health should require that the basements and sub-floor spaces be thoroughly ventilated; and no mill-dam owner who used water should be allowed to keep the pond much less than full.

Dr. O. W. Wight, Health Officer of Detroit, spoke on the "Prevention of Communicable Diseases." He showed clearly the contagious nature of those diseases; the great and unnecessary loss of human life resulting therefrom; and how they were best restricted, citing cases from his own long experience in Milwaukee and in Detroit. The main points in an outbreak of a contagious disease are:

1. On the part of the householder and physician—

- (a). Speedy determination of the nature of the disease;
- (b). Prompt notification to health-officer;
- (c). Cheerful acquiescence in regulations of health-officer.

2. On the part of the health-department—

- (a). Immediate separation of sick from the well, as only those required to nurse should be allowed in the room; the sick-room should be an upper chamber;

- (b). Strict quarantine of the premises, and placarding of

premises; if small-pox, all exposed should be vaccinated in both arms;

(c). Private funeral;

(d). Thorough disinfection, after death or recovery, by chlorine gas or fumes of burning sulphur, of bedding, clothing, premises, etc.

Dr. Wight thought that diphtheria and scarlet fever were sometimes spread by careless physicians,—criminal carelessness. During four years in Detroit he had witnessed a large growth of public sentiment in favor of public health-work.

Professor Victor C. Vaughan, of Ann Arbor, member of the State Board of Health, next spoke on "Water-Supply." Sources of water-supply are three—cisterns, surface, and subterranean. Cisterns should always be plastered outside and inside, with an excavation of at least two feet larger than the reservoir, so that a brick or stone wall may be built or plastered as above. Cistern water when boiled and filtered is the best for use. Professor Vaughan cited cases in Ann Arbor and Adrian in which drain-water percolated into cistern-water, causing malignant typhoid fever. In the discussion of surface-water, he said that we had in this country all the conditions for the development] and spread of the cholera-germ should it once reach our shores. Well-water is a suspicious water, because of the ease with which contamination can be carried down through the sand and gravel into the well. Subterranean water is not necessarily pure. By carefully selected illustrations he showed that contamination would be carried through the soil an almost limitless distance by the percolation of water, the water acting as the carrying agent.

Prof. Jas. H. Shepard, of Ypsilanti, read a paper on "The Present Condition of the Water Supply of Ypsilanti." The city has been settled 60 to 70 years; it has no sewers, and

the privy system is in use. The drinking-water is obtained mostly from shallow wells. Ten careful analyses of well water had been made, and in eight of them chlorine and albuminoid ammonia were found largely in excess of what pure water should contain. The water of a drive-well, and that of the Huron river, which runs through the city, were comparatively pure.

A paper by Professor C. F. R. Bellows, of Ypsilanti, on "The Future Water Supply of Ypsilanti," was next read. It is an able paper, but is of a rather local interest, although the principle recommended may be quite generally adopted. The proposal is to have a general water-supply from one very large well outside the city proper, in such a locality that the watershed supplying the well shall not be liable to contamination by privies, etc.

The papers on water-supply called out a spirited discussion, led by Dr. Wight, of Detroit, and Professor Palmer, of the State University.

Dr. Ruth A. French, of Ypsilanti, read a paper on "Management of Earth-Closets." It is a practical way out of the "privy-nuisance" for towns too small to have sewers and a general water-supply. Earth-closets deodorize the excreta, destroy germs of contagious diseases, and are necessary to invalids.

Erwin F. Smith, of Lansing, spoke on the "Relations of Sewerage and Water-supply to the Death-rate in Cities." His general propositions were : —

1. Some method of sewage-disposal is a necessity of civilized life ;

2. Dry-earth closets, *properly cared for*, will answer for isolated dwellings and small villages, but water-carriage is the only system adapted to large towns and cities ;

3. The prevalence of typhoid and cholera is in an inverse ratio to the sewerage of a city ;

4. The modern increase of diphtheria cannot be attributed to sewers ;

5. The death-rate from all causes falls whenever a city is thoroughly sewered, and never attains its *ante-sewered* maximum ;

6. Judged solely from the standpoint of pecuniary economy, —the lowest of all standards—sewerage and water-supply can be successfully defended against all opposition.

The statistics used in this paper are drawn from the highest authorities, American and foreign ; are brought down to the close of the year 1884, and in many cases cover long periods—10 to 40 years. They show that typhoid fever has fallen off from one-half to nine-tenths in sewered cities since they adopted sewerage, and that such cities are practically secure from the ravages of cholera. *Per contra*, in non-sewered cities, the typhoid-fever and the cholera-mortality is as great to-day as it was thirty years ago.

Dr. H. F. Lyster, of Detroit, advocated the separate system of sewerage as best, and said it could be built in small cities for about \$6,000 per mile. He spoke of the evil influence of soil-infection by vaults and privies, and urged sewerage as a sanitary necessity.

At the close of the convention, arrangements were made for the organization of a local sanitary association, the local committee of the convention being a committee to complete this organization.

STATE BOARDS OF HEALTH.

THE ILLINOIS STATE BOARD OF HEALTH.

The Illinois State Board of Health held its regular quarterly meeting in Chicago on the 2nd and 3rd of July.

In addition to the transaction of its usual routine business, the board proceeded to the consideration of the cases of those against whom charges of unprofessional conduct had been preferred. The first was that of John Bate, who was charged with having advertised his calling under such fictitious names as A. G. Olin and J. G. Carlton, and with having been convicted in the United States court of having sent obscene literature through the mails, for which he was sentenced to the penitentiary. Proper notice was served upon him prior to the meeting of the board, but he failed to appear, either in person or by counsel, to defend himself against these charges, which were considered in due form by the board. The evidence of the correctness of the charges preferred seemed conclusive to the board, and the license to practice medicine, which had been issued to him in 1877, was revoked and annulled, on the ground of his having been "guilty of unprofessional and dishonorable conduct."

The next case considered was that of one J. Cresap McCoy, now located in St. Louis, Missouri, who had once been located in Belleville, Illinois. He was charged by the board with having circulated his advertisements, in which claims and promises were made by him which were considered false and

fraudulent. He was duly notified to appear before the board to defend himself against the charges made against him. He failed to appear, as required, either in person or by counsel, and after having investigated his case the board considered the charges fully proven and revoked and annulled the license, "for unprofessional and dishonorable conduct," which had been issued to him in February, 1885.

Other cases were considered, among them that of "one Henry H. Williams," of St. Louis; also of "a Dr. Westmoreland," of St. Louis, and of a "J. G. Gilfilan," at Lenzburg, Illinois, and of "H. D. Flower, M. D., of Fulton City," Illinois, and of "Dr. W. B. Watson, of Streator, Illinois." Their cases have not yet been disposed of by the board.

The report of the secretary of the board makes a very favorable showing of the public health of the State of Illinois.

A few scattered cases of small-pox have occurred during the preceding three months, in different parts of the State, but the disease had been prevented from spreading.

The board has not relaxed its efforts at securing good sanitation for the entire state, which were instituted when the danger of the appearance of cholera in this country seemed greater than it does at present. Even in the absence of this dreaded scourge, the good accomplished—immediate and prospective—by such work is of incalculable advantage to the individual and to the state, and the board deserves recognition of its efforts, and commendation for them.

The secretary's report notices the fact that the city of Chicago has placed an additional appropriation of one hundred thousand dollars at the disposal of the Commissioner of Health of the city, for the improvement of the sanitary condition of the city, which sum is being judiciously expended, and the house-to-house inspection thoroughly conducted. The

legislature of the state has made an appropriation of forty thousand dollars as a contingent fund, available in case of an outbreak of any epidemic disease. In addition, it has increased the amount of the appropriation for the current expenses of the State Board of Health.

The subject of the existence in the state of cases of glanders was considered by the board, and a conference was had with the State Veterinarian, who strongly urged upon physicians and the public generally, the exercise of great care regarding this fatal disease. Horses affected with it should be killed without consideration to their pecuniary value. On no account should any chances be taken of the disease being contracted by human beings, of which there is much danger, as may also be said of its kindred disease, known as farcy.

The secretary, in commenting on the report of the State Veterinarian, says: "The practical deduction from the foregoing is, that in localities where glanders among horses exists, physicians, in making up the diagnosis of an obscure case among their patients, would do well to bear in mind the resemblance of glanders, in the early stages, to rheumatism, typhoid fever, and pyæmia; and, in the chronic stage, to syphilis and tuberculosis. Under such circumstances, the occupation and history of the sufferer should be taken into consideration; and, remembering the highly contagious nature and practical incurability of glanders, proper precautions should be observed until it is demonstrated that it is not that disease."

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the Chicago Medical Journal and Examiner.)

At the quarterly meeting of the State Board of Health of Michigan, held July 14, 1885, at its office in Lansing, the following members were present: Drs. Avery, Lyster, Hazlewood, Vaughan, Tyler and Baker.

The board spent much time in examining plans, as required by law, of a proposed new double cottage at the Reform School at Lansing, a building designed to accommodate 100 pupils. The plans were submitted by the architect, Mr. Wm. Appleyard, of Lansing. The board approved the plans for ventilating and warming the second and third floors. With reference to the first floor, the board recommended, in order to avoid the settling of dust in the registers, that iron hoods be placed over the fresh-air inlets which enter the school-rooms through the floor, and that two additional foul-air outlets, each of a size equal to that of the present outlet, be provided for the two school-rooms,—one in the west wall of the west room, and the other in the east wall of the east room, and that these shafts be heated by steam pipes. Each of these two school-rooms is thirty by forty feet, and ten feet high, designed to accommodate fifty pupils. Fresh air is brought into each room by two shafts, having an area of 512 square inches. The foul-air shaft for each room is only one-half the size of the inlet pipes; the area being 256 square inches. The recommendation by the Board of Health is that the outlets equal the inlets in area. The method of heating and of taking fresh air into the building was approved, and also the making of the basement floor of cement troweled smooth.

The secretary presented a printed statement in regard to

the charges made by a minority of the legislative Committee on Investigation, and asked that a committee be appointed to fully investigate the conduct of the office, and the several laws governing the action of this board. Drs. Hazlewood, Vaughan and Tyler were made such a committee.

The Secretary read a *résumé* of the work of other state Boards of Health, and of city boards of health; also a report in regard to recent legislation in Michigan in regard to subjects relating to public health. The act passed by the legislature appropriating ten thousand dollars as an epidemic contingent fund was also read by the secretary, and the board appointed Drs. Baker and Lyster a committee to frame rules under that law, and submit them to the members, so that they can be in readiness in case of threatened occurrence of cholera, small-pox, etc. The board authorized the secretary, should cholera appear in Michigan, immediately to proceed to the place, or send a competent person to confer with and aid the local board in restricting the spread of the disease; and it was informally agreed that if cholera appeared in the United States, the president of the board should at once call a meeting. The revision of the document on restriction of cholera, issued by the board in 1884, and the printing of 20,000 copies for distribution, were ordered.

The Board directed that the names and addresses of health officers in Michigan be printed in pamphlet form.

The subject of typhoid fever was discussed, and the secretary was instructed to issue a circular designed to collect information from health officers in localities where typhoid fever occurs; and a committee was appointed to prepare and have printed a document giving methods of preventing and restricting typhoid fever, the document to be distributed in localities where it occurs.

The board considered the subject of the carrying of infected articles and bodies, dead from contagious diseases, and circulars relating to that subject were ordered to be printed and sent to health officers and to railroad companies.

The following is from the secretary's report of work done during the quarter ending, July 13, 1885, the leading features of which are as follows: The weekly and monthly bulletins of health in Michigan, and the meteorology and mortality reports had been prepared from the numerous reports received, and sent out as heretofore. The footings and computations on meteorological registers and on the sickness reports and tables have been carried on; and the meteorological computations for the year 1884 nearly completed ready for tabulation. The office had made large distributions of documents relative to the work of health officers, and to the restriction of contagious diseases, to newly appointed health officers, and to others, especially in localities where such diseases have occurred. The proceedings of the sanitary convention at Lansing have been edited, sent to the printer, and the proof on most of it read. Articles on meteorology and sickness in Michigan in 1883 have been completed from data previously collected. Data collected by the office relative to scarlet fever in Michigan in 1884 have been compiled; and also those relative to diphtheria. A map has been prepared showing the distribution of diphtheria in Michigan in 1884. Small-pox has been present in Michigan during the quarter: at Bellevue, Eaton county; Alba, Antrim county; Battle Creek, Girard township; Branch county, and South Haven. The outbreak at South Haven was confined to those first exposed, and has been stampeded out, after nine cases occurred with one death. The infection at South Haven was from a German immigrant who sailed from Bremen, April 12th, on the ship *Donan*,

North German Lloyd line. The immigrant was broken out with small-pox when he reached South Haven, April 27, and might have been quarantined *en route*, and the outbreak thus confined to the one case. All infected persons were at once vaccinated by the health officer, but the virus was not good, and thus precious time was lost. This outbreak is but another added to the many constantly recurring outbreaks of communicable diseases in Michigan and the northwest, to which a faithfully executed immigrant inspection service, carried on by the national government, would put an end, or greatly lessen. At the present, so far as known, there is not a case of small-pox in Michigan. Typhus fever was reported at Grand Rapids, during the week ending July 4th.

Cholera is spreading with great violence in Mediterranean Spain, hundreds are dying daily. It was reported as present in Marseilles over a month ago, and July 10th, at Toulon. A strange and fatal disease, believed to be cholera, was also reported from Portugal. Asiatic cholera will probably reach this country this year or next year, and the State Board of Health has prepared to meet the emergency by many lines of work, as best it could. About twelve thousand copies of the document on the best method for the prevention and restriction of cholera were distributed to the people last year. The recent distribution of documents relative to typhoid fever, and especially the correspondence with health officers throughout many parts of the state, on the best method of restricting this disease, has done something in the way of drill in the two important methods applicable in case of cholera,—the disinfection of all bowel discharges and the protection of the purity of the water supply. Much, however, remains to be done in many localities in the way of abating nuisances, and in protecting wells from sources of contamination. The legislature has

passed an act granting to the State Board of Health power to establish a system of inspection of immigrants and travelers, and the disinfection of baggage, etc., liable to be infected with cholera or other dangerous communicable disease; but the act was not given immediate effect and so does not take effect until September 18th, 1885. The contingent appropriation to enable the Board to carry on the inspection, etc., provided for in the act can be used on or after September 18th, in case the Governor thinks its use is necessary. Reports relative to examinations during this quarter, by this board, of plans for buildings, have been sent to the boards governing the Michigan Asylum for the Insane at Kalamazoo, the Northern Asylum for the Insane at Traverse City, and the State Reform School at Lansing. Over six hundred and fifty pages of the letter-book have been used in copying the most important parts of the correspondence, and other branches of the office work has been large during the quarter, and the legislature made additional demands upon the time of the office.

A very successful Sanitary Convention was held during the quarter at Ypsilanti.

BOOK REVIEWS.

THE CURABILITY AND TREATMENT OF PULMONARY PHTHISIS
By S. JACCOUD, *Paris*. *Translated by* MONTAGUE HALLOCK,
M. D., *London*. *New York*: D. APPLETON & CO.; *Chicago*:
JANSEN, MCCLURG & CO. 1885.

This book is the substance of a course of lectures by Professor Jaccond, delivered during the winter of 1881 and 1882. In the preface the author states that he has been led to publish the work, both on account of the original character of certain pathological views which he holds, and also by the novelty of his conclusions and methods of treatment.

The first chapter is in part devoted to an attempt to prove that phthisis is curable—a position which will scarcely be questioned, I presume, by any one familiar with the American literature of the subject. He believes in the unity of tubercle but admits a duality of form, which, after all, consists only in quantity of tuberculous matter.

The conditions which influence the curability of the disease are considered in the second chapter. In studying these, he divides the cases into three (3) groups.

1. The hereditary.
2. The innate.
3. The acquired.

The first he thinks if less curable, is still amenable to treatment, but this treatment should be commenced in infancy and continued to adult life, if indeed adult life is reached. Children should not be allowed to nurse phthisical mothers, and

should not be allowed to live in the family with phthisical patients.

The author firmly believes in the communicability of the disease, but as these lectures were delivered before the discovery of Koch, he is unable to form an opinion as to the agent of communication. Rightly, as all will agree, he attaches the greatest importance to good nutrition as a prophylactic measure.

By innate phthisis is meant that form of the disease "observed in descendants of those who, though not tubercular, are weakened by scrofula, cachectic diabetes (?), alcoholism, or simply by bad hygienic conditions." Precisely how phthisis exists in a latent form in these persons the author explains only by the general statement that "tuberculosis is the common result of all forms of constitutional deterioration, either in the family or in the individual."

The innate form, he considers more amenable to treatment than the hereditary.

The acquired phthisis he again divides into two groups:

- 1st. Those cases resulting simply from mal-nutrition.
- 2nd. Those consequent upon some constitutional defect that is secondary to some other disease.

Of all forms of phthisis, those depending upon simple mal-nutrition are the most hopeful under proper treatment.

We cannot follow the author through a somewhat lengthy discussion of the etiology and the conditions of curability, but the reader who has patience to read this chapter will find many suggestions of interest.

The lectures upon climate are especially interesting—reference being made to the principal stations in Europe and Northern Africa, while no mention, or only a brief reference, is found to localities in America.

The style of the work is diffusive and in some parts obscure or contradictory. The translator assumes on the part of the reader a pitiable ignorance of scientific terms, thinking it necessary to explain the meaning of such expressions as "*histogenetic*," "*hydrotherapeutics*," "*epigenesis*," "*heteromorphism*," etc., etc. He certainly desires to be understood.

H. A. J.

A TREATISE ON ASIATIC CHOLERA. *Edited and prepared by* EDMUND CHARLES WENDT, M. D., *New York. New York: WILLIAM WOOD & CO. 1885. Chicago: W. T. KEENER, 96 Washington St.*

The publication of this treatise, at this time, is an opportune and valuable contribution to medical literature. It is especially valuable to American readers in presenting, in careful detail, a history of cholera since its first appearance in this country in 1832. Its course and progress are marked across the continent with the precision of the advance of a successful army, and its frequent repulses are justly referred to intelligent and persistent sanitary precautions. The history of the disease, as presented in this volume, constitutes the strongest possible plea for this mode of defence. The various theories of causation are given in chronological order, including the recent alleged discoveries of Koch as presented at the Berlin Cholera Conference in July, of last year, and the later researches of Maurin and Lange. The subject has been treated in all its aspects in a highly satisfactory manner, and all the mooted questions, relating to the cause, propagation, prevention, and treatment of the disease, have been discussed in a judicial spirit, as free as possible from editorial prejudice. The volume is well entitled to a place in medical libraries.

J. F. T.

ELEMENTS OF PRACTICAL MEDICINE. By ALFRED H. CARTER, M. D., *London. Member of the Royal College of Physicians, London; Physician to the Queen's Hospital, Birmingham; Emeritus Professor of Physiology, Queen's College, Birmingham; Examiner in Medicine for University of Aberdeen, etc.* 12mo. D. APPLETON & Co., N. Y. Chicago: W. T. KEENER, 96 Washington St.

This work, as its title indicates, is an elementary work and is not intended for the practitioner, but for the student as an introduction to the study of medicine. The author has arranged his subjects under their respective sections in a condensed and clear form, robbing them of many points not generally accepted by the medical world, and giving the latest accepted facts. The book will be particularly valuable to the student who is a candidate for hospital appointment, and the therapeutic index may also be a source of comfort to him.

R. R.

A TREATISE ON PRACTICAL CHEMISTRY AND QUALITATIVE INORGANIC ANALYSIS. By FRANK CLOWES, D. SC. *Philadelphia: LEE BROS. & Co.; Chicago, JANSEN, McCLURG & Co.*

This work, which now appears in the third American edition, is intended for general laboratory students, and is one of the best of its kind in use.

The first part of the book deals with the preparation and properties of various simple substances, solids, liquids and gases, while following sections take up, systematically, the reactions and processes of qualitative analysis.

It is well written, clear and full enough for the general student, while for those making a specialty of chemistry it serves as a good introduction.

J. H. L.

NEWS ITEMS.

THE ILLINOIS ANATOMICAL LAW.

AN ACT to promote the science of medicine and surgery in the State of Illinois. Approved June 26, 1885. In force July 1, 1885.

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly:* That superintendents of penitentiaries, houses of correction and bridewells, wardens of hospitals, insane asylums and poor houses, coroners, sheriffs, jailers, city and county undertakers, and all other State, county, town and city officers, in whose custody the body of any deceased person, required to be buried at public expense, shall be, shall give permission to any physician or surgeon, (a licentiate of the State board of health), or any medical college or school, public or private, of any city, town or county, upon his or their request therefor to receive and remove free of charge or expense, after having given proper notice to relatives or guardians of the deceased, the bodies of such deceased persons to be buried at public expense, to be by him or them used within the State, for advancement of medical science; preference being given to medical colleges or schools, public or private; said bodies being distributed to and among same, equitably; the number assigned to each, being in proportion to the students of each college or school: *Provided however,* that if any person claiming to be, and satisfying the proper authorities that he is of kindred to the deceased, shall ask to have the body for burial, it shall be surrendered for interment: *And*

provided further, that any medical college or school, public or private, or any officers of the same, that shall receive the bodies of deceased persons for the purpose of scientific study, under the provisions of this act, shall furnish the same to students of medicine and surgery, who may be under their instruction, at a price not exceeding the sum of five dollars for each and every such deceased body so furnished.

SEC. 2. Any physician or surgeon, (a licentiate of the Illinois State Board of Health) or any medical college or school, public or private, before receiving any dead body or bodies, shall give to the proper authority, surrendering the same to him or them, a sufficient bond that said body or bodies shall be used only for the promotion of medical science within this State; and whoever shall use said body or bodies for any other purpose, or shall remove the same beyond the limits of this State; and whosoever shall sell or buy any such body or bodies or shall traffic in the same, shall be deemed guilty of a misdemeanor, and shall, on conviction, be fined in a sum of not less than one hundred dollars, and be imprisoned in the county jail for a term not less than thirty days nor more than one year; the fine accruing from such conviction, to be paid into the school fund of the county where the offense shall have been committed.

SEC. 3. Any officer refusing to deliver the remains or body of any deceased person when demanded in accordance with the provisions of this act, shall pay a penalty of not less than fifty dollars, nor more than one hundred dollars for the first offense, and for the second offense, a penalty of not less than one hundred dollars, nor more than five hundred dollars; and for a third offense, or any offense thereafter, the penalty of not less than five hundred dollars, or to be imprisoned in the county jail not less than six nor more than twelve months, or both, at

the discretion of the court; such penalties to be sued for by the health department, as the case may be.

SEC. 4. It shall be the duty of preceptors, professors and teachers, and all officers of medical colleges and schools, public or private, who shall receive any dead body or bodies, in pursuance of the provisions of this act, decently to bury, in some public cemetery, or to cremate the same in a furnace properly constructed for that purpose, the remains of all bodies, after they shall have answered the purpose of study aforesaid, and for any neglect or violations of the provisions of this act, the party or parties so neglecting, shall on conviction, forfeit or pay a penalty of not less than fifty dollars, nor more than one hundred dollars, or be imprisoned in the county jail not less than six nor more than twelve months, or both, at the discretion of the court; such penalties to be sued for by school officers, or any person interested therein, for the benefit of the school fund of the county in which the offense shall have been committed.

SEC. 5. An act entitled "An act to promote the science of medicine and surgery in the State of Illinois," approved February 16, 1874, in force July 1, 1874, is hereby repealed.

BOOKS RECEIVED.

Compendium der Ohrenheilkunde. Von Dr. A. Sarron. Leipzig Ambr. Abel.

The Nature of Mind and Human Automatism, by Morton Prince, M. D.

Micro-Chemistry of Poisons, including their Physiological, Pathological, and Legal Relations, with an Appendix, by Theodore G. Wormley, M. D., Ph. D., LL. D. Second edition. Philadelphia: J. B. Lippincott & Co.; Chicago: W. T. Keener.

A General Index to the First Twenty Volumes of St. Bartholomew's Hospital Reports from 1865 to 1884. London: Smith, Elder & Co.

Urinary and Renal Derangements and Calculous Disorders, by Leonel S. Beale, M. D. Philadelphia: Blakiston Son & Co.; Chicago: W. T. Keener.

Hay-Fever, by Charles E. Sajons, M. D. Philadelphia: F. A. Davis, Attorney.

A Treatise on Asiatic Cholera. Edited and Prepared by Edmund Charles Wendt, M. D. New York: William Wood & Co.; Chicago: W. T. Keener.

A Manual for Hospital Nurses and others Engaged in Attending on the Sick, by Edward J. Domville. Philadelphia: P. Blakiston, Son & Co.; Chicago: W. T. Keener.

A Treatise on Practical Chemistry, by Frank Clowes, D. Sc. Philadelphia: Lea Bros. & Co.; Chicago: Jansen, McClurg & Co.

A Treatise on the Science and Practice of Midwifery, by W. S. Playfair, M. D., F. R. C. P. Fourth American edition. Philadelphia: Lea Bros. & Co.; Chicago: Jansen, McClurg & Co.

The Rational Treatment of Rupture, by A. H. Parker, M. D., Chicago.

Report on the Mortality and Vital Statistics of the United States as returned at the Tenth Census, by John S. Billings, Surgeon U. S. Army.

A Practical Treatise on Urinary and Renal Diseases including Urinary Deposits, by William Roberts, M. D., F. R. S. Philadelphia: Lea Bros. & Co.; Chicago: Jansen, McClurg & Co.

Second Report of the State Board of Health of the State of Tennessee.

PAMPHLETS RECEIVED.

Proceedings of the Nineteenth Annual Meeting of the Alumni Association of the Chicago Medical College.

Prospectus of the Oakwood Retreat, Lake Geneva, Wisconsin.

Sanitary Suggestions or How to Disinfect our Homes.

A Case of Extensive Recurrent Sarcomatous Disease. By John S. Miller, M. D.

Lectures on Phthisis Pulmonalis. By Ernest L. Shurley, M. D.

Medical Legislation. By Henry O. Marcy, A. M., M. D.

Report on Practical Medicine. By Ira E. Oatman, M. D.

Report of the Board of Trustees of the Michigan Asylum.

Electricity as a Remedial Agent. By George C. Pitzer, M. D.

A Word in Regard to the Pennsylvania State Board of Health Bill. By R. Harvey Reed, M. D.

Vitiligo. By R. Harvey Reed, M. D.

The Ohio State Sanitary Association. Second Annual Meeting.

Sanitary Schedule for State Sanitary Survey. Illinois State Board of Health.

Some Interesting Reflex Neuroses. By John J. Caldwell, M. D.

Twenty-fourth Annual Report of the Cincinnati Hospital.

Asiatic Cholera. By Oscar C. De Wolf, A. M., M. D.

Forty-second Annual Report of the Managers of the State Lunatic Asylum at Utica, New York.

Thirty-sixth Annual Report of the Trustees and Superintendent of the Indiana Hospital for the Insane.

Restraint or Non-restraint in the Treatment of the Insane. By Dr. W. B. Fletcher.

The Physiological Effects and Therapeutical Uses of Hydrastis. By Roberts Bartholow, M. D., LL. D.

Special Report on the Hungerford Outbreak. Arthur S. Hardy, Secretary.

Vital Statistics in Tennessee. A Report by J. B. Plunket, M. D.

Specialties and their Relation to the Medical Profession. By L. Duncan Bulkley, A. M., M. D.

"An Enemy Came and Sowed Tares." By Joseph Eastman, M. D.

Endometritis Fungosa. By James B. Hunter, M. D.

Constitutional Treatment of Caries and Necrosis. By Hal. C. Wyman, M. D.

History of the Clamp-Suture of the late Dr .J. Marion Sims, and Why it was Abandoned by the Profession. By Nathan Bozeman, M. D.

The Over-crowding of the Profession. By Dr. E. J. Doering, M. D.

Suerseus Obturators. By Dr. L. Th. Weber.

Medical Society of the State of Tennessee. Transactions 1885.

Pneumonia in Young Children. By L. Emmett Holt, A. M., M. D.

Does Quinine Abort Pneumonia? By L. Emmet Holt, A. M., M. D.

Hydatid Tumors of the Brain. By R. Harvey Reed, M. D.

Cholera, its Nature, Symptoms, History, Cause and Prevention. By J. B. McConnell, M. D.

EXTRACTS.

PRACTICAL SANITATION.

The following extract is from instructions recently issued by the Health Commissioner of New York city, as published in *The Sanitarian*:

DIPHTHERIA, scarlet fever, measles, and small-pox are highly contagious diseases, attacking persons of all ages, and may be contracted from those who are already affected, from the clothes that they have worn, and from everything which has been in the room with them. Even the walls of the room may be a source of infection to persons coming into it after the patient has left it, unless the infectious material is destroyed. In order to prevent the spread of these diseases in a family or house where they exist, and to promote the recovery of the sick, the following simple measures should be conscientiously and rigidly carried out, thereby preventing much suffering and saving human life.

An upper, sunny room, provided if possible with an open fireplace, and with no children on the same floor, should be arranged for the patient by removing everything from it which can possibly be spared, such as books, clothing, carpets, upholstered furniture, and window-curtains; also plants, birds, and other pets, remembering that when once the patient has entered the room nothing can with safety be removed until disinfected. By thus stripping the room of all articles except those absolutely necessary, the subsequent disinfection is much more

easily performed. If it is deemed necessary, a few small rugs will take the place of the carpet.

The fireplace serves a double purpose: first, as a means of ventilation; and second, by keeping a small fire burning therein, when the weather will permit, the pieces of soft muslin or other material, which should always be used instead of towels or handkerchiefs in wiping the secretions from the mouth or nose, especially in diphtheria, can readily be destroyed by fire, and thus contagion through them prevented.

One or two adults should take the entire charge of the patient, under no circumstances coming in contact with other persons, especially children. Kissing and "taking the breath" of persons having contagious disease are especially dangerous, and should always be avoided. Open windows and open fireplaces, with fire in them day and night, avoiding draughts and chilly air, protect the sick and those who nurse them.

Nothing should be removed from the room when the patient has once entered it until it has been thoroughly disinfected.

Books, scrap-books, toys, or other playthings should always be destroyed at the termination of the sickness, as being undoubted carriers of contagion. Locks of hair and other keepsakes have also been known to spread contagious disease.

Nurses should keep themselves and their patients as clean as possible, remembering that the more the infection accumulates the more dangerous does it become. Special care should be taken in changing sheets and the clothing not to shake them or disturb them more than is absolutely necessary to remove them. As these acts disseminate the particles of skin which are removed with them, and which convey the germs of the disease, they should be removed carefully and folded together, and immediately disinfected.

DISINFECTION.

It is a popular idea that anything which destroys an offensive odor is a disinfectant. This is not only erroneous, but harmful, as reliance is thus placed on substances that in nowise act as destroyers of infectious material, which latter substances are the only true disinfectants. The methods recommended in this circular are, to a considerable extent, based upon the results of the work of the Committee on Disinfectants of the American Public Health Association.

DISINFECTANTS.

The agents recommended herein for disinfection are :

1. Fire.
2. Boiling water.
3. Chloride of lime or chlorinated lime, either dry or in solution, as Standard Solution No. 1.
4. Solution of chlorinated soda, diluted as Standard Solution No. 3.
5. Sulphur.
6. Bichloride of Mercury.

Bichloride of mercury, or corrosive sublimate, a powerful disinfectant, is included in the above list for one purpose only; that is, for the disinfection of privy-vaults which contain a large amount of material believed to be infected. As this circular is intended for general distribution, the writer hesitates to recommend for general use an agent which may, through improper use, endanger life.

Fire.—As already directed, the materials used in wiping away the discharges of the sick may be burned in the open fireplace, if such there be. In general, this method of disposal is to be recommended for all substances which have been exposed to infection, which cannot be treated with boiling water, and could it be carried out in all cases, would make disinfection a very simple matter. If it is desired to burn sub-

stances suspected of being infected, and there is no fire in the room, such substances may be wrapped in a sheet soaked with Standard Solution No. 3, hereafter referred to, and in this condition conveyed to the fire in the furnace or elsewhere.

Boiling Water.—Experiment has demonstrated that boiling in water for half an hour will destroy the vitality of all known disease-germs. This is therefore recommended as the best means to be employed in the disinfection of all articles which can be thus treated, such as the body-clothing of the patient, the bedclothes, towels, etc. All utensils which are used in the room in the feeding of the patient, such as plates, tumblers, spoons, knives, forks, etc., should likewise be treated with boiling water before being removed from the room. Food itself not consumed by the patient should not be used by others, as it is liable to become infected in the sick-room.

If, as will often be the case, there are no facilities for treating articles with boiling water in the sick-room, they may with safety be removed to another part of the house for this treatment if they are carefully enveloped in a towel or sheet, as the case may require, which has been thoroughly soaked with either Standard Solution No. 1 or Standard Solution No. 3. Thus enveloped, they should be put in the water, and boiled for the required time.

Chloride of Lime.—This substance, also called chlorinated lime, to be effective as a disinfectant, must be of the best quality, and in purchasing it only that should be accepted which is enclosed in glass bottles, as when packed in paper or wooden boxes it is liable to have so deteriorated as to be worthless for disinfecting purposes. When dissolved in water, in the proportion of four ounces to the gallon, it forms the Standard Solution No. 1, recommended by the Committee on Disinfectants. The solution thus prepared is to be used in the disinfection of

discharges in contagious diseases, especially in typhoid fever and cholera. One pint should be well mixed with each discharge; after ten minutes disinfection is completed, and the contents of the vessel may be then safely thrown in the privy vault or water-closet. The expectorated matter of those sick with consumption should be discharged into a cup half filled with this solution or with Standard Solution No. 3.

To thoroughly disinfect a privy vault, Standard Solution No. 1 should be used in large quantities—one gallon for each gallon of material in the vault; the surface of the contents should be subsequently daily covered with the dry chloride of lime. The cost of the Solution No. 1 is about three cents a gallon.

Solution of Chlorinated Soda.—To be effective, this solution must contain at least three per cent. of available chlorine, and in purchasing it care should be exercised to obtain such a quality. This is sometimes spoken of as Labarraque's Solution; but as this latter substance is too weak to act as a disinfectant, the name is liable to mislead, and is therefore here not used. The Standard Solution No. 3 of the committee is made by adding five parts of water to one part of the solution of chlorinated soda. The cost of this solution is about ten cents a gallon. When thus diluted, it may be used for all the purposes for which Standard Solution No. 1 was recommended, and is of a somewhat more agreeable odor, though more expensive.

This solution should be used to cleanse portions of the body soiled with discharges of those sick with infectious diseases, or the hands of attendants similarly soiled.

Bichloride of Mercury (Corrosive Sublimate), is recommended in this circular to be used only in the disinfection of privy-vaults which contain so much material, believed to be infected with the germs of typhoid fever or cholera, that the

disinfection by Chloride of Lime would be impracticable. In using this it should be dissolved in the proportion of one ounce of Bichloride of Mercury to one gallon of water; this quantity will disinfect four gallons of infected excremental matter.

TREATMENT OF THE BODY OF THE PATIENT AFTER RECOVERY
OR DEATH.

When the patient has recovered, he should be first sponged over with the solution of chlorinated soda, diluted in the proportion of one part to twenty parts of water; and, indeed, during the course of the illness, occasional sponging of the body with this very diluted solution, under the direction of the attending physician, will be of value in preventing the escape from the surface of the body of infectious material. When, after recovery, the body has been thus sponged, not omitting the head and hair, a thorough washing of the body with soap and warm water should follow, and the patient dressed in clothes which have not been exposed to infection. This should take place in another room than the one occupied during the illness.

Should the case result fatally, the body should be thoroughly sponged with either Standard Solution No. 1 or No. 3, and then wrapped completely in a sheet saturated with one of these solutions, and enclosed in a coffin, which is to be closed, and the interment must take place within twenty-four hours, and be strictly private. If the interment is to take place at a distance, requiring transportation by any other means than a hearse, the coffin must be of metal, or metal-lined, and hermetically sealed.

THE CHICAGO MEDICAL JOURNAL AND EXAMINER.

VOL. LI. ♡

SEPTEMBER, 1885.

No. 3.

ORIGINAL COMMUNICATIONS.

A METHOD OF DETECTING LACERATIONS OF THE CERVIX UTERI POST PARTUM. *By* JOHN BARTLETT, M. D.

Read before the Chicago Medical Society, Aug. 3rd, 1885.

My object in addressing the society this evening is to suggest a way and a time in which laceration of the cervix uteri may be easily and certainly detected soon after its occurrence. Directly after delivery, if the fingers be introduced deeply into the vagina up to the contracted os uteri internum, and then carried in any direction a little outwardly, the flabby and floating ring formed by the non-contractile cervix may be felt, as Guillemeau described it, three hundred years ago, "like a section of large intestine." By very carefully following the entire circumference of this ring, an existing rent may be discovered. But this examination is attended with some difficulties. The patient is exhausted with her labor, and fatigued with our attentions, and just now, since "it is all over," longing for rest. She is impatient of, and perturbed by, this post-factum inquiry. Her state of mind, and possible expression

of complaint, are apt to render an examination, which the physician cannot regard as absolutely necessary, less exact and thorough than it would be otherwise. And then, the soft and floating margins of the cervix uteri have often somewhat of an intangible feel, if I may so express myself, gliding past the fingers like a detached clot of blood, and occasionally, in some portion of their circumference, passing out of satisfactory reach.

On these accounts it is not surprising to hear an obstetrician say that he cannot tell whether the post partum cervix is lacerated or not. Now, I desire to teach those who may not be familiar with the short lesson that I propose to impart this evening, how to discover a cervixal laceration after labor. The error of accoucheurs who fail to recognize such a condition is that they do not make their observation of the suspected cervix at the proper time. They examine the neck actually as we have just done mentally—after the clearance of the uterus. The favorable moment for the examination—and this is the gist of my remarks—is just as the placenta is beginning to occupy and distend the cervix. The collar of flesh is then not floating and uncertain, but on the stretch, expanded, forming a distinct ring easily followed in its entire circumference. At this moment, then, just as the cervical tube is being rendered tense by the placental mass, any laceration in it may be detected with ease and certainty.*

North Clark Street.

*Dr. Bartlett illustrated his remarks with earthenware models, turned by a potter under his immediate direction.

OLEATE OF MANGANESE. *By* FRANKLIN H. MARTIN, M. D.
Fellow of the Chicago Gynecological Society.

(Read before the Chicago Medical Society, August 3rd, 1885.)

There is little doubt left in the minds of therapeutists in regard to the value of manganese as a remedy in certain forms of menstrual trouble. The remedy, in the form of the permanganate of potash, was first brought to the attention of the profession by Ringer and Murrell of London in the spring of 1883. They recommended the drug in functional amenorrhœa. Soon after their article appeared in the London *Lancet*, I commenced experimenting with the same preparation, and published the result of my investigation in the *New York Medical Record* for September 29th, 1883. That was the first, to my knowledge, that anything on the subject was published in this country.

In the course of my experiments, acting upon the theory that the drug produced menstruation by stimulating the menstrual organs, I was induced to give the remedy in menorrhagia, and metrorrhagia dependent upon an *atonic* condition of these organs. I found to my gratification that it acted equally as well in these conditions as in the opposite. In my published reports I have always been careful to emphasize this point, because it is a demonstration of the manner of action of the drug, *i. e.* by *stimulating* the menstrual organs. I have had unmistakable evidence of its action as a menstrual stimulant, in amenorrhœa, menorrhagia and metrorrhagia. I have obtained very gratifying results from its administration in the irregularities incident to approaching menopause. I have also received very gratifying letters from a large number of physicians in this country, containing confirmatory proof of its efficacy in one or more of the several conditions mentioned

above. The remedy has been favorably commented upon by THOMAS of New York, who said: "I think it is the best emmenagogue which has yet been discovered." Dr. Roberts Bartholow not only recognizes its applicability in amenorrhœa, but also its power as a general menstrual stimulant, making it equally efficacious in other forms of menstrual difficulties, dependent upon an *atonic* condition. He said: "The same power which can so stimulate the sexual functions must, when exerted in other directions, prove equally effective."

After publishing my second report on this subject, I received a letter from Sydney Ringer, of London, in which he expresses his gratification at the result of my experiments, and in which he says: "Like you, I have found the permanganate most useful in *atonic* conditions." And further, he says: "I was quite prepared to learn that the permanganate is useful in menorrhagia.

Since there is no longer any doubt about the great value of manganese in these distressing menstrual difficulties, the next formidable problem for the therapists to solve, is—how shall it be administered? The permanganate of potash, the original preparation used for experiments, and administration, in any form, is liable to act as an irritant to the stomach, and is very objectionable to many on that account. It has in many ingenious ways been made into pills, but as these pills must of necessity have for their basis kaolin, or some other inorganic substance, they are not satisfactorily dissolved and absorbed. The compressed tablets of Wyeth & Brother, and others, are objectionable in many cases of irritable stomach, because of the irritating undiluted drug coming in direct contact with its mucous membrane. The binocide of manganese has, on account of its insolubility, proved to be inert. Therefore because of the many difficulties of administration this valuable

remedy has not met with the reception by the profession that is its due.

While having this fact under consideration, it was suggested to me by Dr. Lewis L. McArthur, of this city, that an oleate of manganese might be prepared. Inasmuch as the method of prescribing other popular drugs in the form of oleate is becoming quite universal, the scheme appeared feasible. An oleate of manganese, was prepared for me by Mr. Edward Kreyssler, a very competent chemist with the firm of Forysth & Schmid, of this city. I am indebted to Mr. Kreyssler for the following account of the *method of preparation, and of its physical and chemical properties*. The oleate of manganese was prepared as follows: A solution of sulphate of manganese was made in distilled water, and to it a solution of sodium oleate was added. On mixing these two solutions gradually, and with constant stirring, a precipitate of oleate of manganese resulted. This precipitate, upon heating, changed to a putty-like mass. This was washed several times with warm distilled water, to remove the sodium sulphate, and the resulting putty-like mass was the pure oleate of manganese.

It is of a light gray color, having a pinkish hue, of a sweet musty taste, and peculiar clay-like odor. It is sparingly soluble in alcohol, and soluble in ether, chloroform, olive oil, and oleic acid.

THE METHOD OF APPLICATION.—Of a twenty per centum solution of the oleate in oleic acid, one half of a drachm to a drachm is applied to the abdomen of the patient, and its absorption promoted by friction, produced by vigorous rubbing of the surface with the palm of the hand or with the fingers. The rubbing should be continued until the oil has entirely disappeared by absorption.

In cases where it is found impracticable to apply it to the

abdomen on account of tenderness, it may be applied to the back or the inner surfaces of the thighs.

In *amenorrhœa* it should be applied, if possible, every night for a week preceding the expected menstrual period, or at the time the menstruation is due, and until it makes its appearance. In cases of *menorrhagia* or *metrorrhagia* it can be applied in smaller quantities, every night, until the desired effect is produced.

REPORT OF CASES.—At the present writing, I have but four cases to report. I have prescribed the preparation in fifteen (15) cases, all but four (4) have as yet failed to report to me.

In the four that I have been able to keep under observation, the result has been very gratifying. Two of the cases were *amenorrhœa* in young women, one irregular menstruation in early married life, one irregularity incident to approaching menopause.

CASE 1. Had passed two menstrual periods and the remedy was prescribed about one week after the last menstruation was due. On account of abdominal tenderness the oil was applied to the back. One drachm of a twenty per centum solution was applied for three consecutive nights, at the end of which time menstruation appeared and lasted four days.

CASE 2. Was that of a young girl 19 years of age, whose menstrual flow had always been irregular. The cause I attributed to an over-worked nervous system, the young lady having just passed a long anxious siege of college examinations. She had passed two or three menstrual periods without a show, and had lost account of when the next period was due. The oleate was prescribed. It was applied four nights to back and abdomen, by a competent nurse, when the most natural menstruation the young lady had ever experienced commenced.

CASE 3. A married woman, age 42, who had always been healthy until six months ago. Since that time she has been suffering with irregular menstruation. At one time it did not appear for two months, the suffering from "pressure" in the meantime being very severe. On the other hand, at times the flow had been excessive, and the result was almost complete exhaustion. At the time the oleate was prescribed, the patient was suffering from distressing backache, headache and pelvic pressure, from suppression. At this time her menstruation, was two weeks over due. A drachm of the twenty per centum solution of the oleate was used two nights, thoroughly applied by a nurse, when the flow appeared suddenly, and all the distressing symptoms of former menstruations were absent.

CASE 4. A dispensary patient, married, age 25 years, had had no children. She had not menstruated for two and one-half months. No signs of pregnancy further than the suppression of the menses. The patient was poorly nourished. She had "caught cold." By physical examination nothing was found to account for this condition of affairs, except a small, and poorly developed uterus. The patient was ordered to use the oleate, and directed how to use it. She returned in one week menstruating. The flow had appeared three days after using the medicine.

2139 Wabash Ave.

DOES TOBACCO IMPAIR SIGHT? *A Paper Read Before the Chicago Medical Society, August 3rd, 1885. By W. FRANKLIN COLEMAN, M. D., M. R. C. S., England. Chicago.*

Mr. President and Gentlemen: Your secretary has suggested that every candidate for, or newly-elected member of, this society should be obliged to read a paper as an initiation. Should you also think it a fit and proper obligation, a sufficient excuse for this youthful conduct is not wanting.

To consider the physical effects of a poisonous weed, food for neither man nor beast, yet consumed alike in every quarter of the globe, by savage and sage, saint and sinner, is a theme of no little consequence.

Tobacco belongs to the family solanaceæ, which claims such relations as hyoscyamus, belladonna, stramonium, and, curiously enough, the potato. Its important active principles are an alkaloid called nicotine, a volatile oil, nicotianin.

Von Brock says: "It is from smoking tobacco that nicotine poisoning chiefly arises—the smoke itself containing the nicotine. A great deal of it accumulates on the lower part of the pipe, and the remains of cigars are much more impregnated with it than parts fresh-smoked."

The observations of Claude Bernard, that nicotine at first produces contraction of the arteries, and later on the vessels become distended, agree with the views of Uspensky, who, from physiological researches, concludes that nicotine first stimulates then paralyzes the vasomotor centres.

From personal experience, and the literature at my command, I know of no more constant detrimental effect of the use of tobacco than more or less impairment of vision—so-called amblyopia.

The use of tobacco is so frequently associated with drinking

to excess that it is questioned by some whether tobacco alone ever produces defective eyesight; whether the alcohol is not the chief or only etiological factor. In England there is a general belief among surgeons that tobacco is the more frequent cause of the amblyopia, while in America alcohol is more generally thought to be the principal or only agent.

Dr. Webster, of New York, in an able paper reporting twenty cases of amblyopia from the abuse of alcohol and tobacco, remarks: "That the abuse of alcohol and tobacco alone, or of alcohol and tobacco combined, may produce impairment of vision, no physician acquainted with the subject will, I think, venture to deny. Some, however, doubt that tobacco alone ever causes impairment of vision, and indeed it is difficult to demonstrate that it ever does."

Dr. Webster apparently holds the above views so firmly that he quite overlooks the fact that two of his cases prove that tobacco alone does produce amblyopia, while there is not a single case to show that alcohol alone was the cause of impaired sight—for all who used alcohol also smoked to excess. Take, for example, case 7, C. McK., æt. 49; has smoked ten to fifteen strong cigars daily for ten years; *occasionally* drinks a glass or two of gin; V=1-16 each eye. Incipient atrophy of optic nerve. Case 12, æt. 60; sight failing over a year; has smoked a strong pipe most of his waking hours for more than forty years; has rarely tasted liquor; V=1-40 each eye; brick dust atrophy of both optic nerves; ordered to stop tobacco and return in a week; the vision in right eye doubled; in left all but doubled.

Observers unanimously agree that amblyopia is produced only by the *excessive*, not the *occasional*, use of alcohol or tobacco, or tobacco and alcohol combined. Hence, in the case of the "occasional drink," and in 12, the "rare taste" of liquor cannot be held responsible for the loss of sight.

So many competent observers believe in alcohol-amblyopia, I readily accept their view, but in my experience the opportunity for making out a case against alcohol is rare, as the tippler is almost invariably a smoker. The case against tobacco alone can be much more frequently proven, since it is not uncommon for an inveterate smoker to be a teetotaler, or to taste liquors but rarely.

The celebrated philanthropist, McKenzie, who was first to bring to public notice the effects of tobacco upon vision, wrote in his text-book of 1840: "I have already had occasion to repeatedly hint my suspicions that one of the narcotic acids which custom has foolishly introduced into common use, namely, tobacco, is a frequent cause of amaurosis." More recently, such men as Wordsworth, Hart, Hutchinson, Forster, Hirschberg, Sichel, Luriero, Jackson, and a host of others, have given much attention to the effects of tobacco, and they maintain that it gives rise to impaired sight and even blindness.

Mr. Hutchinson, ever cautious, would not express an opinion in 1870, but remarked to me at Moorfields, in 1876, that he had come to think the effect of alcohol antagonistic to tobacco as a cause of amblyopia, unless the alcohol is taken in such excess as to produce degenerative effects of the system. He had seen amblyopia more frequently and more advanced in smokers who abstained from than in those who used alcohol. Dr. Berry, of Edinburg, holds a similar opinion.

In tobacco-amblyopia, the patient, usually a man past thirty, complains of gradual failure of vision; the defect, unless very considerable, being much the same in both eyes. The sight is generally described by the patient and surgeon as better in a dull light. Dr. Berry, after careful testing, concludes this is a mistake, having found the acuity of vision really less when the light is diminished. Central amblyopia is a very charac-

teristic symptom, direct vision alone, as a rule, being impaired, while the indirect is only slightly or not at all affected; hence, the person is enabled to get about without the least difficulty. Förster first drew attention to red-blindness, in the center of the field of vision, as a pathognomonic symptom. In the less severe cases, this central color scotoma may be recognized when a central blind-spot for white light or form cannot be detected. The color-blindness extends to the periphery of the field only in the more serious cases. The impairment of sight may occur with or without other symptoms of tobacco-poisoning of the brain, and so forth, such as loss of memory, headache, sleeplessness, loss of appetite, palpitation, etc.

The ophthalmoscope in the majority of cases, it is said, cannot detect any pathological change. When abnormal appearances are seen they are wholly confined to the optic disc. At first it may look smoky or hazy. This stage of hyperæmia is followed by decoloration of the temporal half of the papilla, which later extends to the whole disc and occasionally terminates in complete atrophy and blindness. Once I have seen the very rare condition, perivasculitis. According to Hutchinson, the stages of the disease of the nerves occupy from four to twelve months.

In 1867 Mr. Hutchinson, reporting thirty-seven cases of primary white atrophy of the optic nerve, all that had come under his care during three years, attributed twenty-seven to the effect of tobacco. Dr. Green, of St. Louis, says a very large proportion of the cases of optic nerve atrophy, which have fallen under his observation, have been in cigar makers and workmen in the tobacco factories, who habitually use tobacco very freely by smoking and chewing.

Amblyopia is more readily produced by the strong tobaccos, such as the "Schag" of England. Chewing is more danger-

ous than smoking (Nettleship). Berry is disposed to think that the blindness very rarely occurs if smoking be only indulged in after a meal.

In functional cases, vision will be completely restored if tobacco is given up, and alcohol, should it be used in excess. If there be marked ophthalmoscopic changes in the nerve, the defect of vision may remain stationary, but, in my experience, vision has nearly always improved under treatment. Blindness very rarely results, perhaps only in case of progressive atrophy of the nerve.

Little is evidently known in regard to the pathology of tobacco amblyopia. The view of Leber, that there is an anomaly in the blood-supply to the superficial layer only of the optic nerve, seems, at the same time, to account best for the *central scotoma* and the generally favorable course of the disease; for, it will be remembered, the external optic nerve fibers are distributed to the center of the retina, while the inner fibres of the nerve supply the eccentric portions of the retina. Berry well maintains that the disease is essentially functional that even interstitial change in the nerve is not the direct cause of the amblyopia, in proof of which he cites the well-known fact that pallor of the disc remains even when vision recovers. The change in the nerve and the amblyopia, he attributes at once to vasomotor disturbance or other functional disorder.

In regard to treatment, the withholding of tobacco is an evident requisite. Opinion is divided as to the benefit of the hypodermic use of strychnia usually resorted to. If the strychnia is pushed to the point of toleration or spasm, usually requiring 1-10 grain three times a day, often 1-8 grain, occasionally 1-4 grain, I believe recovery is always hastened and often occasioned. The success of galvanic electricity claims more attention as a remedy. Dr. Bradford, of Boston, related

to me a case of atrophy of the optic nerve, from tobacco, in which the blind eye recovered useful vision by the use of chloride of barium, after strychnia, electricity, and all the usual remedies had failed.

Since I have more particularly recorded cases, I find in my note books, among 1,824 eye-patients, forty-six who had partial to total loss of sight, accompanied so far by conditions similar to those noticed in tobacco-amblyopia, as to present either no ophthalmoscopic changes in the eye, or else hyperæmia, decoloration or atrophy of the optic papilla.

These forty-six cases may be thus classified :

Males, 33 ; females, 13.

Cases referred to tobacco alone, 13.

“ “ “ “ and alcohol, 9.

“ “ “ other causes, 24.

All the tobacco, and tobacco and alcohol cases, occurred in males.

Of those referred to other causes, ten were males, fourteen females.

Cases in which there was hyperæmia, discoloration or atrophy of the disc :

Tobacco, males, 12 ; females, 0.

Alcohol and tobacco, males, 9 ; females, 0.

Other causes, males, 7 ; females, 11.

Cases which presented no ophthalmoscopic changes :

Tobacco, males, 1 ; females, 0.

Tobacco and alcohol, males, 0 ; females, 0.

Other causes, males, 3 ; females, 3.

In regard to the above, the notable absence of any case of pure alcohol amblyopia may be accounted for by the alcoholic patient being, invariably, a heavy smoker.

I must admit, females were not questioned as to the alcohol

or smoking habit, there being no reason to suspect them of such male virtues. Again, my experience of so large a proportion of patients as twenty out of twenty-one, who presented changes in the optic disc in contrast to the rule that no pathological changes are seen in tobacco-amblyopia, may be due to the advanced stage of the disease when first examined. This experience agrees, however, with that of Dr. Webster, who reports marked ophthalmoscopic changes in all of his twenty cases.

In illustration of tobacco-amblyopia I will refer briefly to four patients who were not addicted to drinking—and to one other.

J. T., age 44. Consulted me in February, '83, on account of defective sight, of eight months' duration. Vision, right eye $\frac{1}{3}$, left eye $\frac{1}{2}$. In reading, the right eye sees only the first part of a word, and the left only the latter part—temporal hemiopia.

Has smoked six pipefuls daily for the past fifteen years; health good. The temporal half of each optic disc is pale.

Advised to stop smoking, and strychnia prescribed.

Two months later, he remarked he had followed advice and the sight was quite restored.

CASE 2. H. O., age, 21. Came under my care December 28, '83. His sight has gradually failed during the past fifteen months, and at present he can barely distinguish light. No symptoms of brain or spinal disease. No history of syphilis or other poisoning, except tobacco. Health very good. Has for four years past smoked six to seven pipefuls of tobacco daily, and chewed one-fifth of a pound weekly.

There is advanced white atrophy of both optic papillæ.

Ordered 4 minims of a four-fifths per cent. solution of strychnia to be given hypodermically twice a day, and increased one minim daily—and tobacco to be discontinued.

Five weeks later: The strychnia has been increased to 1-5 of a grain, producing only occasional muscular spasm. As vision has not improved, galvanic electricity directed to be applied daily to the closed lids, temples and nape of the neck.

Repeat strychnia 1-12 of a grain, three times a day, by the stomach and increase the dose.

Three weeks subsequently, Feb. 27th, he is taking 1-5 of a grain of strychnia three times a day and having electricity applied.

The vision is now increased to 1-70 in each eye, and the patient is able to see his way in the street very well.

April 7th. Discharged with sight remaining the same. It is now reported that a good deal of smoking was slyly indulged in.

CASE 3. Nov. 25, '80. J. McKay, aged 31. Complains of failing sight for the past three months, which is now reduced to 1-17 in each eye. He began to smoke at eleven years of age, and for three years past has averaged ten pipefuls a day. Very rarely tastes liquor. Ophthalmoscopic examination.

Both optic discs are hyperæmic. Advised to give up tobacco, have temples cupped, and take K. I.

The patient returned in six weeks.

Has stopped smoking and gained twelve pounds in weight. Vision has improved from 1-17 to 1-5 in each eye.

The temporal side of each disc is now pale.

Jan. 25th. There now present white lines (of perivasculitis) at the margins of retinal vessels on and near the discs. Strychnia prescribed.

CASE 4. W. S., aged 24. Consulted me in October '79. Noticed nine months ago in school he could not read with the right eye; three months after observed the same defect in the left, but two weeks later could see to read fairly well. A week later still, the eyes again failed. Is anæmic and nervous, but

considers his health pretty good. Has smoked six to eight pipefuls daily from the age of fifteen until two years ago, and since then three to four pipes a day.

Right eye can count fingers within six inches only on the temporal side. Left eye vision=20-140.

Externally and internally the eyes appear normal.

Treatment.—Strychnia hypodermically twice a day. Patient discharged nine days with vision of right eye improved eight times and doubled in the left.

Allow me to cite a case which seems to confirm the view that alcohol counteracts the effect of tobacco:

C. M., aged thirty-one, relates, July, 12, '84, that his sight has been failing for six weeks. That he has smoked six to eight pipes a day for the past seventeen years, and has been a hard drinker for eight years, until three months ago, since which time he has abstained completely. The patient *volunteered* the remark, "I think stopping spirits suddenly caused my sight to fail." Vision had always been good up to six weeks ago (*i. e.*, six weeks after giving up spirits).

Treatment.—Take strychnia, gr. 1-20, three times daily, and advised to stop smoking in preference to returning to spirits.

In six days vision doubled in both eyes. Take strychnia, gr., 1-16 *ter die*.

October 9th.—Vision of right eye has increased in three months from 1-10 to $\frac{1}{2}$, and in left from 1-10 to $\frac{2}{3}$.

Let us return to the question—Does tobacco impair sight?

Among the authors of text-books in my possession, who express their belief in tobacco amblyopia, are Scotch, American, German and French, viz: McKenzie, Wolfe; Gowers, Wells, Nettleship; Noyes, Williams; Stellwag, Schweigger, Greüfeld, Mittendorf; Mayer, De Wecker. The only two authors I know who dissent from the general view, are Carter and Lawson (English).

Mr. Carter quotes a letter from Dr. Dickson, of Constantinople, to the effect that the consumption of tobacco in that city averages three pounds weight per head, monthly, but amblyopia is a rare affection.

Dr. Hubsch, oculist, in Constantinople, also writes him, "I have never attributed amaurosis to the abuse of tobacco."

Mr. Carter adds, "I have obtained the same kind of negative evidence from Egypt and India, and in the face of it I do not attach much importance to the fact that several patients who have suffered from severe atrophy have been great smokers." The last statement is a little weakened when he adds, "If a patient who consults me on account of severe atrophy is a smoker, I always advise him to lay aside tobacco."

It may be maintained by some that impaired sight, the use of tobacco, and the wearing of leather boots, for example, are coincidences, "only that and nothing more."

But when we find, in common with so large a number of competent observers, that impaired vision, accompanied or not by apparent changes in the optic nerve, so frequently occurs without any cause to which it can be attributed, except the use of tobacco, and that the sight so frequently improves when it is given up, without other treatment, or any change in the habits or surroundings of the patient, we can scarcely hope for stronger evidence of the cause of the amblyopia.

Again, observers agree that a large class of cases presenting central color blindness, and a diminution of direct visual acuity, have a toxic origin, such as tobacco, alcohol, etc., and that these symptoms are most frequently produced by tobacco. Berry says he has looked out for the symptoms of tobacco amblyopia in women for the past five or six years and has only met with them in three cases. These three women smoked to excess but did not drink. Now, it is well known that women in Great

Britain seldom smoke, but lamentably often feel disposed to take spirits. They thus afford, negatively, evidence for tobacco-amblyopia, and proof that the above symptoms are less frequently produced by alcohol than tobacco.

Further, the abundant testimony that tobacco acts detrimentally upon other parts of the nervous system, even causes myelitis and atrophy of the cord, affords strong circumstantial evidence for attributing neuritis and atrophy of the optic nerve likewise to tobacco.

Bean describes eight cases of angina pectoris in which the attacks ceased when smoking was stopped, and returned when the patient began to smoke.

Most of you are doubtless familiar with the "tobacco heart" of Dr. Bowditch.

Erb, of Heidelberg, says: "Various authors adduce excessive tobacco smoking among the causes of *tabes dorsalis*."

Those who disbelieve in tobacco-amblyopia think their view is strongly supported, inasmuch as among the army of smokers there are relatively a few only whose sight becomes affected. The absence of amblyopia in Constantinople, where smoking is so general, seems to support more strongly still the above view. But the *mild quality* of the tobacco and the *modè* of smoking in Turkey differ so much from the "shag" of England, and the method of smoking in England and America, as possibly to account for the immunity of the Turk.

It has been experimentally determined by a French pharmacist, Malapert, that a dry cigar yields, while burning, a very small amount of watery vapor, the smoke cools rapidly and allows the condensation of nicotine before it reaches the mouth. Hence the first half of a cigar or pipe smokes more mildly than the second, in which a certain amount of watery vapor and nicotine freed by the first half is deposited.

From this it is evident the cigar smoker may, if he "throw

away the worser part of it, live the purer with the other half."

Sir Henry Thompson tells us "the ladies of Constantinople smoke fifty cigarettes a day, merely taking a few whiffs from each, then throw the cigarette away, and considers little harm ensues from such smoking."

In the case of the pipe, the quantity of nicotine that will reach the mouth may possibly be reduced to the safety-point by smoking through long stems or water.

If the Turk, who ornamented the geography of our early school days, still survives, the long, flexible stem of his magnificent pipe may at this moment be the safeguard of his optic nerves.

The custom among the Turks of drawing the smoke through water in the nargilleh or water-pipe, a process called "bubble, bubble," is a very valid additional reason for their freedom from tobacco-amblyopia.

Peculiarity of race, idiosyncrasy of constitution, nervous exhaustion, impaired nutrition and other debilitating causes may or may not account for the elective affinity of tobacco, alcohol, lead, silver, mercury, nitro-benzol, sulphide of carbon, quinine, salicylic and osmic acids, for the eyes of certain individuals. But to deny that these substances produce amblyopia because so large a number are exposed with impunity, is as reasonable as to deny small-pox can reproduce itself because the majority of people escape, or that cirrhosis of the liver is caused by alcohol because so many dram drinkers maintain sound livers, or that cold and wet can produce rheumatism because so few of the exposed multitude suffer.

If this paper should be the means of securing your views, and afford any hints concerning the entity and nature of tobacco-amblyopia, I shall be fully repaid and feel that your time has not been squandered.

70 Monroe Street.

EDITORIAL.

THE INTERNATIONAL MEDICAL CONGRESS OF 1887.

The time appointed for the next meeting in New York, on September 3rd, of the Committee of Arrangements for *The Ninth International Medical Congress* is near at hand, and we desire to express the hope that the meeting may be characterized by evidence of appreciation of the responsibility of the position of that committee. The out-look for the congress is critical, and the honor of the medical profession of the United States is involved in the success of that congress. Therefore those who have been intrusted with the preparation for it should weigh well every official act of theirs. Too many mistakes have already been made. The present committee cannot afford to add to that number, any more than the profession at large can afford to have it done. Broad, liberal ground should be taken by the committee. It has the experience of the eight preceding congresses to guide it. Surely the experience gained in them should greatly aid the present committee, and the advantages of that experience should not be lost or ignored.

In the organization of the congress, the same rules should govern in the next that have obtained in the past. No distinction should be made between the foreign and the American members. The fact should be distinctly kept prominent that it is not a delegated body. It has not been in the past; there is no valid reason why there should be any effort to make the

next one such. There should not be two or more classes of members. All must meet on the same plane—with equal privileges—equal duties—and equal responsibilities. Let all local ethical questions be eliminated. The foreign representatives expect and demand this, and such is their right. There may be honest differences of opinion, in our own country, on certain points of principle and policy, but there can be no valid reason for thrusting them, or their effects, upon foreigners who may come here. Sight should not be lost of the fact that science and humanity are the objects for which these congresses convene, and that all matters of selfishness and partisanship should be subordinated thereto.

As our faith, as a profession, was pledged, when our invitation was accepted, to do all in our power to make a success of the congress, we cannot do less. Everything that might conflict therewith, and diminish the prospect of such success, must be kept in abeyance.

For the official positions—whether the most prominent or the subordinate ones—only representative men should be selected. Much of the success or failure of the congress will depend upon the wisdom and the fairness of the action of the committee at its coming meeting. We hope that it will be such that there may be no occasion for vain regret.

CHOLERA.

The ravages of cholera in Spain continue, and excite the sympathy of the world.

The experience of last year seems to have been lost in Marseilles, and that city is again paying the penalty that filth and neglect of sanitary measures impose.

It was but natural to suppose that after such afflictions as

Toulon and Marseilles experienced, a year ago, there would have been no neglect of any sanitary measures calculated to prevent a recurrence of that dreadful disease this year, but, if the reports that reach us be true, but little has been done by the authorities of either Toulon or Marseilles to improve the sanitary condition of those cities in the interval, although the fact has been known to them, and to the world, that their condition was of the most favorable character for the spread of the disease. The authorities were indifferent in the interval: now all classes of society seem to be suffering, and reports say the populace are terror-stricken.

It is fortunate that the disease has been confined to so restricted a territory until the season is thus far advanced. This gives timely warning to other countries, having constant intercourse with those thus afflicted, that no precautions should be omitted to prevent introduction of the disease from those countries.

Distance should not lull the United States into fancied security, nor the lateness of the season lead to the relaxing of quarantine regulations nor sanitary measures, especially along the lines of travel and traffic.

It would scarcely seem necessary to remind the authorities and the public that regrets are useless and unavailing when opportunities for securing safety have been thrown away and the plague is in our midst, were it not that Toulon and Marseilles are now offering evidence of the negligence that seems to characterize people, even in the face of threatening danger. With those examples, and the present experience in Spain, it would be culpable if the authorities of the general government of the United States, and our state and local health-officials should omit any part of their important duties in an effort to prevent the introduction and spread of cholera in America.

MR. LAWSON TAIT ON THE MODERN TREATMENT OF UTERINE MYOMA.

MR. LAWSON TAIT'S recent paper, entitled "*The Modern Treatment of Uterine Myoma*," read in the section of Obstetric Medicine at the annual meeting of the British Medical Association in Cardiff, will attract universal attention. This paper supplements the discussion of DR. THOMAS MORE MADDEN'S essay upon the subject before the British Gynecological Society on Wednesday, 27th May, 1885.

In this discussion MR. TAIT said, with reference to the management of uterine myoma, "I must not go into the question of medical treatment, because it is very much like the chapter in the History of Ireland about snakes—there are no snakes in Ireland. The medical treatment of uterine myomata is a myth."

MR. TAIT'S modern experience confirms the conclusions of his paper, read 24th May, 1881, before the Royal Medical and Chirurgical Society, and published in *The American Journal of the Medical Sciences*, January, 1882.

The first point of his thesis is "to show that removal of the uterine appendages for myoma, when properly performed, is not a fatal operation, but one with hardly any mortality at all, even when the tumours are large, and when the patients are brought almost to death's door by hæmorrhage."

In support of this proposition, a list of fifty-eight operations without a single death, since January, 1884, is appended.

The second point in the thesis is: "That the results of oöphorectomy are satisfactory and permanent, so that we may with confidence recommend it for relief of suffering and the saving of life."

In support of this proposition, statements as to the present condition of his first fifty cases, drawn from personal observa-

tion, the practitioner who sent the case, or the patient herself, are adduced. Of the fifty cases, failure occurred only in two instances.

"Somewhat jealous for the honor of English surgery,' MR. TAIT claims the priority of the introduction of oöphorectomy. He proposed and discussed the procedure in October, 1871, and successfully performed the operation on February 11th, 1872. HEGAR'S first operation, which was unsuccessful, was performed July 27th, 1872.

MR. TAIT'S second successful operation was performed on August 1st, 1872.

DR. BATTEY'S first operation, which was also successful, was performed on August 17th, 1872.

DR. FERRAN AND CHOLERA-INOCULATION.

The medical profession of the world has hoped, rather than expected, that the experiments and the claims of Dr. Ferran might prove satisfactory. On theoretical grounds it was not clear how the claims which he made should be realized. Since the disease is believed to be introduced through the alimentary canal, and one attack of it does not prevent repeated attacks, it was difficult to understand by what means he was to so impress the system, from without, as to secure immunity whenever the cause of the disease, be it comma-bacillus or anything else, found its way into the alimentary canal, and lodged in fertile soil for its development. If it be assumed that Dr. Ferran was honest in his convictions and his practice, it was heroic to have assumed the responsibility of inoculating so many human beings on the strength of theory alone, for this he seems to have done.

His expectations, his promises, appear to have failed of real-

ization. Some who were inoculated by him have escaped death, but, if reports be true, the percentage of recoveries seems to be so small of those who have been attacked, after inoculation, as to indicate that they have been the exception rather than the rule.

By some it is claimed that the degree of confidence inspired in those who had been inoculated rendered them less liable to be attacked by the disease by diminishing the depression which follows dread of it. Even if this claim be well founded, it seems but little compensation for the apparent risk incurred by the inoculation.

Certainly, facts appear yet to be wanting to justify Dr. Ferran's claims, or further persisting in his inoculation. This seems to be the verdict of the scientists who have investigated the matter, as far as it was practicable to do so.

Thus much has been said on the assumption that Dr. Ferran has been honest—both in his belief and his practice—a claim that, in the light of the latest advices, it seems difficult to accord him.

When it is considered how great are the ravages of the disease for which no preventive is now known, and how great the sufferings, and terrible the death of those afflicted with cholera, it is inconceivable how any man, who claims to be a physician and a benefactor of mankind, should be willing to keep secret anything that he might know that could prove so great a boon to his fellow-man as a preventive or a remedy for cholera, and yet be unwilling to impart that knowledge, except for money-consideration. That he has done this is in itself sufficient to make him a self-condemned man, but if it be true as charged, and, seemingly truthfully charged, that his so-called virus is but a preparation of elaterium with which he inoculates people, and that he administers the same medicine,

internally, to produce catharsis, that shall resemble the purging of cholera, what language can be found that shall be adequate to give expression to the villainy, the fiendishness, of such conduct!

CORRESPONDENCE.

NEGAUNEE, Michigan.

To the Editors of the CHICAGO MEDICAL JOURNAL AND EXAMINER:

Messrs. Editors: One of the most valuable of the drugs known to me is the *Bryonia Alba*, the white bryony of Germany and France. In the human body the sphere of its action is both wide and strikingly manifest. If properly administered, it never fails to produce its curative effects. But the drug has been forgotten. It occupies a scarcely-read page in the National Dispensatory, and barely receives mention in that clever little "EXTRA PHARMACOPŒIA" of Martindale and Westcott.

The white bryony is useful in many pathological conditions. When a patient has a cold involving the lungs, three or four minims of the tincture, largely diluted, may be given with good results, every three hours. In pleurisy, one or two drops may be administered every hour. In bronchitis of the larger tubes three or four minims may be given every three hours, especially if the cough be dry and tight, and the patient complain of painful stitches in the upper portion of the chest. In the bronchial cough of old people, two or three minims given every two to four hours will commonly relieve the symptoms. In all cases the pure tincture should be used.

The drug operates effectively in combination with aconite and gelsemium. If necessary to prescribe two of such medicaments, it is best to give them by alternation.

Bryonia should be tried by a fair test, in order that its real merits may be recognized. It should not be used once timidly, and then, failing to secure the end desired, be laid aside, while a dose of paregoric is substituted. It should not be misjudged because it has achieved popularity with those who call themselves homœopaths. It can be made to appear that its merits are genuine, and its value peculiar to itself, if it be judged without prejudice.

Take, for example, a patient affected with pneumonia, in an early stage of the disease. Let a teaspoonful of the following mixture be given every half hour until the perspiration is freely secreted, and after that once every hour or two :

R.

Bryoniæ Albæ Tincturæ,..... ℥ x.

Aconiti Radicis Tincturæ,..... ℥ xvi.

Aquæ Destillatæ ad,..... ℥ ii.

M.

In addition to this, give one-half teaspoonful of Horsford's Acid Phosphate in a half glass of cold water, sweetened to suit the taste. Repeat every two hours, gradually decreasing the dose as the temperature shows a tendency to remain near the normal point.

Should it be desired, however, to test the peculiar efficacy of the phosphate in this disease, after having once reduced the temperature from 103° or 104° F. to 99° or 100° F. its use may be suspended for a day and the relapsing fever observed.

If, however, content with having reduced the temperature and with it most of the distressing symptoms, one may continue with the acid and decrease the dose of aconite

and bryonia as the case requires. Bryonia has a special action upon, and an affinity for, serous membranes, and if pleurisy complicates the case it may be needed in three minim doses, and as often as every two hours. Conjoined with the foregoing treatment, compresses, large and light, should be thoroughly saturated with vinegar and water, and generously applied to the chest, and if there is much headache, to the forehead, as well. These should be renewed quite often, and by an undisturbing hand. So much for the acute trouble. When active disease has ceased, and it is desired to assist nature in removing pathological products, 1-100 of a grain of corrosive sublimate may be given every three hours.

After having treated a few cases in this way, I do not hesitate in saying that one will become an ardent advocate of the use of bryonia.

Since adopting this method of treatment there have been under my care many violent cases, but the record has been a clean one, undefaced by death, and undisturbed by anxiety or alarm.

I have nothing to say to the advocates of Dover's powder, carbonate of ammonia, morphia and quinia, etc., but having tried all these drugs with brilliant success and disastrous failures, I have laid them aside.

Very truly yours,

C. S. LOMBARD, M. D.

SOCIETY PROCEEDINGS.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, August 3rd, 1885. — THE PRESIDENT, PROFESSOR CHARLES T. PARKES, M. D., in the chair.

DR. FRANKLIN H. MARTIN read a paper on the "Oleate of *Manganese*." He said: There is little doubt left in the minds of therapeutists in regard to the value of manganese as a remedy in certain forms of menstrual trouble. The remedy, in the form of permanganate of potash, was first brought to the attention of the profession by Ringer and Murrell, of London, in the spring of 1883. They recommended the drug in functional amenorrhœa. Soon after this he commenced experiments with the same preparations, and published the results in *The New York Medical Record*, Sept. 29, 1883. To his knowledge, that was the first that anything on the subject was published in this country.

In the course of his experiments, acting on the theory that the drug produced menstruation by stimulating the menstrual organs, he was induced to give the remedy in menorrhagia and metrorrhagia dependent upon an *atonic* condition of the organ. He found to his gratification that it acted equally well in these conditions, as in the opposite. He has also obtained good results from its administration in irregularities incident to approaching menopause. He has received very gratifying letters from many members of the profession throughout the

country, who have used the drug in one or more of the conditions mentioned above, with good results.

Professor ETHERIDGE thought much advance would be made in the use of drugs if we were more careful to discover in what conditions they were beneficial. He had found this remedy useful in cases of atonic amenorrhœa, with the uterus in its normal position. He had found the aqueous solution an eligible preparation, and had also used it in the form of a suppository.

Dr. E. J. DOERING, said he had used this remedy in some cases of atonic amenorrhœa with good results. He asked the effect of the drug upon the pregnant uterus.

PROFESSOR PAOLI had used manganese somewhat for several years, in cases of menstrual disorder, with varying degrees of success. It was a useful remedy in many skin diseases. He had not used the oleate, and could not see how it acted upon the uterus, unless, possibly, by being applied at once after being freshly prepared.

DR. MARTIN closed the discussion by saying he had used the aqueous solution in very small doses, also had had the remedy put in dry papers and swallowed with a glassful of water. He had never used it in the form of a suppository. Manganese has no effect on the pregnant uterus. The drug seems to act as a general stimulant to the uterus, causing it to perform its normal function. It might be absorbed as the oleate and so produce its effects.

"Does the Use of Tobacco Injure Sight?" was the subject of a paper read by W. FRANKLIN COLEMAN, M. D.

To consider the physical effects of a poisonous weed, food for neither man nor beast, yet consumed alike in every quarter of the globe, by savage and sage, saint and sinner, is a theme of no little consequence. The active principles of tobacco are

an alkaloid called nicotine and a volatile oil called nicotianin; nicotine is also contained in tobacco-smoke. The observations of Claude Bernard that "nicotine at first produces contraction of the arteries, and later on the vessels become distended," agree with the views of Uspensky, who from physiological researches concludes that "Nicotine first stimulates then paralyzes the vaso-motor centers."

From personal experience, and the literature at his command, he knows of no more constant detrimental effect of the use of tobacco than more or less impairment of vision. In England there is a general belief amongst surgeons that tobacco is more frequently the cause of amblyopia, while in America it is attributed more generally to alcohol.

In regard to treatment, the withholding of tobacco is an evident requisite. Opinion is divided as to the benefit of the hypodermic use of strychnia. He believes that if the strychnia is pushed to the production of spasms, usually requiring 1-10 gr., often $\frac{1}{8}$ and occasionally $\frac{1}{4}$ gr., twice a day, recovery is always hastened and often occasioned.

The great majority of the authors who have written on diseases of the eye agree that amblyopia is often caused by the use of tobacco. That the Turks, who use a large amount of this weed, are not oftener subject to disorders of vision, may be due to their habit of using long stems to their pipes, or to the use of the nargileh or water-pipe, by which means the amount of nicotine that reaches the mouth is much reduced.

Peculiarity of race, idiosyncrasy of constitution, nervous exhaustion, impaired nutrition and other debilitating causes may or may not account for the elective affinity of tobacco for the eyes of certain individuals; but to deny that tobacco produces amblyopia because so large a number smoke their poison with impunity, is as reasonable as to deny that cirrhosis

of the liver is caused by alcohol, because so many dram-drinkers maintain sound livers; or that cold and wet can produce rheumatism, because so few of the exposed multitude suffer.

DR. PAOLI said while the excessive indulgence in tobacco might be harmful, the fact of its almost universal use and continued use in many cases for years resulted in no deleterious effects, would seem to show that its narcotic power, used in the ordinary way, was very slight. He had used tobacco for fifty-five years and felt no ill results. The Germans use large quantities of it, and do not suffer. This seemed to be a case of excess of zeal on the part of the ophthalmologists to discover a cause for amaurosis. We ought to be conservative on this point.

DR. COLEMAN closed by saying that only in certain susceptible conditions was tobacco liable to cause disorders of vision. But that so few suffered was no proof that it had not this baneful influence when acting with other causes.

LACERATION OF THE CERVIX UTERI.

DR. JOHN BARTLETT read a paper in which he said his object in addressing the Society was to suggest a way and a time in which laceration of the cervix uteri may be easily and certainly detected soon after its occurrence.

Directly after delivery, if the fingers be introduced deeply into the vagina up to the contracted os uteri internum, and then carried in any direction a little outwardly, the flabby and floating ring formed by the non-contracted cervix may be felt, as Guillemeau described it three hundred years ago, "like a section of large intestine."

By very carefully following the entire circumference of this ring an existing rent may be discovered. But this examination is attended with some difficulties. The patient is exhausted with her labour, and fatigued with attentions, and just now,

since "it is all over," longing for rest. She is impatient of, and perturbed, by this *post factum* inquiry. Her state of mind, and possible expression of complaint, are apt to render an examination, which the physician cannot regard as absolutely necessary, less exact and thorough than it would be otherwise. And then, the soft and floating margins of the cervix have often somewhat of an intangible feel, if the expression be permitted, gliding past the fingers like a detached clot of blood, and occasionally, in some portion of their circumference, passing out of satisfactory reach.

On this account it is not surprising to hear an obstetrician say that he cannot tell whether the post-partum cervix is lacerated or not. The error of the accoucheurs who fail to recognize such a condition is, that they do not make their observation of the suspected cervix at the proper time. They examine the neck actually, as has just been done mentally—after the clearance of the uterus. The favorable moment for the examination—and that he said was the special point of his remarks—is just as the placenta is beginning to occupy and distend the cervix. The collar of flesh is then not floating and uncertain in feel, but stretched and expanded, forming a distinct ring, easily followed in its entire circumference. At this moment then, just as the cervical tube is being rendered tense by the placental mass, any laceration in it may be detected with ease and certainty.

PROFESSOR ETHERIDGE asked the author of the paper whether he had verified a case by speculum examination after discovering it in the way he had illustrated in his remarks.

PROFESSOR PARKES said he had great difficulty in detecting laceration after delivery, on account of the relaxed condition of the parts. He thought the suggestion of DR. BARTLETT as to the way to obviate this difficulty was a good one.

DR. DOERING inquired as to the size of lacerations he had found.

DR. BARTLETT concluded by saying that he had verified cases of laceration discovered in the manner proposed by him. The largest laceration he had found was one and-a-half inches in length, and the end of the little finger could be passed into it. In one case he encountered considerable hemorrhage from such a rent: and this may be the cause of continuous loss of blood when the os is well contracted.

DR. BARTLETT illustrated his remarks with earthen-ware models, turned by a potter, under his immediate direction.

The society then adjourned.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, Aug. 17, 1885. THE PRESIDENT, PROFESSOR C. T. PARKES, M. D., in the chair.

A CASE OF OVARIOTOMY

Was reported by PROFESSOR C. T. PARKES, as follows: In Feb., 1885, the patient, Mrs. R., aged forty-three, ten children, came under the care of Dr. O'Connell, of Ponca, Nebraska, who diagnosed ovarian tumor. Professor Parkes was requested to perform ovariectomy. He found the patient in fair condition generally, hopeful and clear-minded. The abdomen was glistening with distension. Fluctuation was extremely well marked in all directions and in all positions of the patient. There was no resonance anywhere, and there was no umbilical hernia. Her trouble dated from August, 1884, when a small tumor was perceptible on the right side. It gradually increased in size until January 17, 1885, when local peritonitis set in and was followed by rapid distension. Ovariectomy was done

March 24, 1885. The patient had been placed in a bright light and an incision four inches in length made in the abdominal walls, midway between the umbilicus and pubes, to the peritoneum. There was no peritoneal fluid, but fortunately the bright light enabled him to distinguish between the peritoneum and the sac of the tumor, which were closely united by adhesions. The adhesions were broken down as far as the hand could reach. A trocar was next plunged into the tumor and about eighteen quarts, or about thirty-six pounds, of a dark, sanguineous fluid evacuated. The sac was enormously distended and very thin. After the most of the contents were drawn off, the opening made by the trocar was closed by Neláton's forceps. The sac was still adherent extensively laterally and posteriorly. These adhesions were destroyed as completely as possible, and yet it was impossible to draw the sac through the opening or to reach the deeper adhesions to the pelvis and flanks. Finally a free space was found in the right iliac fossa, the sac turned up and the pedicle found and secured. The greatest difficulty was found in separating the sac from the intestines, which were extensively adherent to the posterior surface of the sac, and could only be reached by turning the tumor upwards after division of the pedicle. A firm, broad adhesion to the stomach at the top of the cyst could not be separated, so a portion of the outer wall of the cyst, corresponding in size to the adhesion, was dissected from the tumor, and in that manner the entire tumor was finally removed. The pedicle was about two inches long and very slender, and came from the right side of the uterus. It was noticed in the specimen exhibited that the sac was almost entire, and that it was not smooth and glistening, but rough from the adhesions, and at the lower part there was an indurated mass about the size of a large orange.

The sac and mass together weighed but three pounds. There was a vast area of oozing surface from which the adhesions had been torn, yet very little blood was lost. The abdominal cavity was thoroughly sponged, a drainage tube introduced, and the wound closed by six silk sutures.

The length of the incision, after the removal of the tumor, was but two inches. The patient progressed favorably until the fourth day, when she was attacked with severe and persistent vomiting, rising temperature and pulse. The stercoraceous vomiting which ensued and the increasing exhaustion until her death, on the sixth day, pointed toward bowel obstruction.

The points to be noticed in this case are the great extent of the adhesions, the only clear space being in the right iliac fossa, the only way to reach them being to ligate and separate the pedicle and then turn the sac upwards; the small size of the pedicle for such a large tumor. It seemed to be approaching the conditions of a free ovarian tumor described by MR. DORAN, who explains their presence by atrophy and absorption of the pedicle taking place when there are very vascular adhesions of the tumor to other parts, through which nourishment is carried on. It was also noted that this patient went along all right for five days, then symptoms of intestinal obstruction set in. The question was raised, whether it is not the urgent duty of the surgeon in such a case to reopen the abdominal wound and search for the seat of the obstruction and remove it.

A CASE REQUIRING BATTEY'S OPERATION

Was next detailed by Professor Parkes. Miss M., age 17, single, an American, had suffered greatly from pain referred to right iliac fossa, increased during menstrual periods, for one year previous to placing herself under his care, January, 1885. She was already an invalid. Examination *per rectum et vaginam* disclosed retroversion of the uterus, accompanied with a dis-

location of the right ovary into the Douglass *cul de sac*. Medical treatment having failed, Battey's operation for the removal of the prolapsed ovary was done June 2, 1885. Nothing unusual occurred during the operation, and the patient convalesced rapidly. The temperature never rose above 99°. The dressing placed upon the wound was the dry dressing consisting of iodoform, antiseptic gauze and a layer of absorbent cotton. This dressing was not removed until the seventh day, when the stitches were removed. The line of cicatrix was perfect throughout. There was no formation of pus. The blood around the stitch-holes was dry and scaly. The case was remarkable, principally, from the absolute freedom from any discomfort during the recovery from the operation. It was the first example of dry wounds Professor Parkes had ever seen. The patient was out in three weeks. The uterus was not fastened in its new position, and is slightly anteflexed, but not anteverted. The morbid specimen exhibited is the ovary much enlarged with two small parovarian cysts developed on it.

A CASE OF DOUBLE OVARIOTOMY

Closed the series of cases presented by Professor Parkes. Mrs. P., aet. 44, and had borne 5 children. She complained of a tumor growing for the last two years over the situation of the gall bladder. February 15, 1885, Professor Parkes made an exploratory operation, and after cutting into the growth, out popped a biliary calculus, about one inch long and bean-shaped. Nothing further was done, and the tumor began to disappear. However, during the manipulation of the abdominal walls he discovered two small tumors in the pelvis, in the region of the ovaries, which were supposed to be ovarian growths, but were not disturbed. But they rapidly grew in size, and were removed by laparotomy on June 16, 1885. The bowels had been moved two days previously. The abdominal incision disclosed

the larger of the two tumors now shown, the larger filled the anterior inlet of the pelvis and was held down by slight adhesions. These were broken down and the mass removed. It was found to be the right ovary degenerated. The pedicle was extremely short and was with difficulty secured. It was tied, divided and the stump dropped. Likewise the left ovary was removed and found to be degenerated. The tumor being smaller and pedicle longer, no difficulty arose. Finally, in sponging, quite free bleeding was noticed from the right pedicle. It was again transfixed close to the uterus and all hemorrhage ceased.

It was noticed that the sigmoid flexure of the colon was distended with fæces, and this condition was remarked as unaccountable, from the fact that free catharsis had been obtained only two days previously. The patient did well for ten days after the operation, with the exception that no action of the bowels could be secured by medicines or enemas. A careful digital examination revealed, high up in the rectum, a stricture which could not admit the end of his index finger. The slight opening was surrounded on all sides by a thick, dense deposit of abnormal growth. The question of relief seemed to stand between forcible dilatation of the stricture and the establishment of an artificial anus. July 30, he dilated the stricture so as to admit three fingers in a cone shape. The tissue was very dense. It broke down with difficulty, and the induration extended up the bowel quite two inches. After this was done the scybalous mass was easily removed. By the next day the bowels had moved several times, freely, and tympany disappeared. As Professor Parkes had to leave the city July 5th, the patient was left in the care of Dr. R. G. Bogue, who subsequently told him the patient had died suddenly on July 10th, with symptoms of perforation of the bowels.

Two inquiries arise :

1st. Is it not well to examine the rectum thoroughly before operations, in all cases ?

2nd. Would the establishment of an artificial opening, as soon as the nature of the obstruction was determined, have given a better result in the case reported ?

Professor Parkes also exhibited A SPECIMEN OF EPITHELIOMA OF THE VULVA, which he had removed by Paquelin's cautery.

PROFESSOR ETHERIDGE, opened the discussion by asking how far we could go in removing portions of the intestine in cases of obstruction. He said that he had recently had a trying experience in case of ovarian tumor, in which, after the operation, the patient reacted well, but in forty-eight hours vomiting came on, which soon became stercoraceous and the patient died. On *post mortem* examination, the whole of the large and most of the small intestines were greatly distended with gas. A short piece of the small intestine, just where it entered the large one, was collapsed, and with great difficulty could any of the gas be forced through it. He asked the author of the paper if he would have had the courage to have removed this portion of the intestine.

DR. FRANKLIN H. MARTIN said he had been very much instructed and entertained by Professor Parkes' well detailed report. It had impressed him with three points or lessons that were dwelt upon in a recent article by A. VANDER VEER, M. D., of Albany, N. Y., in the July number of the *American Journal of Obstetrics*, citing "personal observations on the work of Lawson Tait," at his private hospital, in Birmingham, England. These three points, which to his mind explain, to a great extent, the wonderful results of that great operator, are :

1st. Cleanliness, pure air and sunlight.

2nd. Efficient good-looking nurses.

3rd. Close personal supervision, and attention to after-treatment.

In the first case Professor Parkes reported to-night that good light had saved him from going directly into the sac of the cyst in attempting to enter the peritoneum. This case also, he suggested, might have fared better had he been present to have given personal attention to the movement of the bowels, thus, possibly, removing the obstruction which was apparently present. In the third case, if personal attention had been given to the bowels sooner, the obstructions due to the stricture might have been removed and the ultimate result been more favorable. Here the nurse was at fault. Again, in the third case, if personal attention had been possible, the early operation for artificial anus, as Professor Parkes suggested, might have influenced favorably the ultimate result.

DR. MILLER thought that dilatation of the rectum was the only feasible method of relief in the case in which a malignant growth was formed in the lower bowel. An operation for an artificial anus would have been difficult under the circumstances.

PROFESSOR SARAH H. STEVENSON asked why not open the sigmoid flexure and remove the accumulation from it at the time of the operation?

PROFESSOR PARKES closed the discussion by saying he would remove a portion of the intestine if it presented the only way of saving the patient's life. If in a few days after the operation symptoms of obstruction should come on, he would re-open the wound and seek for the seat of the trouble. He said that his theory of the best mode of procedure in these cases was gaining ground in the profession every day. DR. HAMILTON, of New York, lately reported a case of a gun-shot wound of the abdomen, in which there were eleven perforations of the small and

four of the large intestine. These were sewed up and the patient recovered.

The cause of the constriction in the case reported by Professor Etheridge was probably due to an obstruction of the arterial supply to this part of the intestine, causing it to contract. Little good would come from an operation in this case. He thought an artificial anus might have been made in the second case referred to in his paper, though the bowel was distended. In these cases only a small opening was necessary. This might have prolonged the patient's life a short time. The cause of death was perforation of the bowels resulting from an ulcer incident to the dilatation of the rectum. He generally used saline cathartics to open the bowels. He would not have been justified in removing the accumulation from the sigmoid flexure at the time of operating, on account of the additional shock to the system it would have caused.

OBSERVATIONS ON THE CAUSE AND TREATMENT OF INFANTILE ECZEMA AND ALLIED ERUPTIONS, was the subject of a suggestive paper read by HENRY T. BYFORD, M. D. He said, in the winter of 1880 he had been called to attend Mrs. R. in her fifth confinement. Two of her other children were dead, and two more, apparently healthy at birth, had died in convulsions before they had completed one year of life. Both of the last two had suffered from scabby eruptions and had become somewhat emaciated, but had not been considered syphilitic. The child born at this time, seemingly healthy at first, soon broke out with what appeared to be an ordinary *eczema pustulosum*. This eruption occurred on the scalp and on different parts of the body. The child suffered from progressive emaciation, and at the age of three weeks it would easily have been mistaken for a case of struma, to be treated with cod-liver oil. The patient was quickly relieved by calomel in minute doses and mercurial inunctions.

The next case referred to was that of Augustus G., seen first in the summer of 1876. The child had pustular eczema of the scalp; great nocturnal restlessness and suffered from progressive emaciation. There was no cause to suspect syphilis from the appearance of the child, but the father acknowledged to what seemed to be a perfectly cured attack of syphilis. The eczema rapidly disappeared, and the infant gained in flesh upon calomel powders and mercurial inunctions.

In contrast with these syphilitic cases, he next mentioned the case of E. H., a child one year of age, fat and well nourished, with no possibility of a syphilitic taint, but suffering from an eczema of the head, which spread over the body in patches. Prolonged local treatment had not improved it. The disease soon disappeared under the use of one-fifth grain powders of calomel, given twice a day, and an ointment composed of a dram of carbolic acid in an ounce of oxide of zinc ointment. The child had been over-fed and was put upon a restricted diet. There was no return of the disease.

The next case was one in which the eruption invaded the eyelids and caused great conjunctival sensitiveness. By the use of quarter-grain doses of calomel, given twice a day until a laxative effect was produced, then once a day, combined with the external application of carbolized oxide of zinc ointment and a borax eye-water, the condition of the patient was soon greatly improved.

He had succeeded in relieving many other severe cases of eczema by the use of calomel, and it made no difference on what part of the body the eruption occurred or what the condition of the patient was otherwise.

That eczema so frequently occurs in infancy, the large size and great activity of the liver in early life, and the striking action of calomel, had led the author to associate indigestion.

with infantile eczema as cause and effect. In syphilitic cases the alterative powders often produced an amelioration in the skin trouble sooner than they could through their direct action upon the blood-poison. In all cases it is important to regulate the diet.

He knew of no authority who had considered derangements of the liver, and its accompanying digestive disorders, as the chief cause of eruptions of the skin, or who had recommended calomel as the chief remedy for its cure.

As calomel produced such prompt relief, and as improvement of digestion usually followed rather than attended the action of the remedy, one is led to believe that the cure is brought about not merely by improving digestion but by a removal of waste, irritating, matter from the system, and from the great efficiency of mercury over other laxatives. He believed that the irritating materials are not only in the retained fecal matter but also in the blood—the products of imperfect digestion, assimilation and excretion.

He was led to the use of calomel in eczema from noting its good effect in cases due to syphilis, and as these patients improved so well under its use, he next tried it in cases where syphilis was only suspected, and then in all cases.

The usual dose was from one-quarter to one-eighth of a grain powder, given twice a day, the dose to be reduced if too great irritation of the bowels was produced. In cases of children over two and a half years of age, in order to avoid salivation, he usually gave purgative doses of calomel every six or eight days and trusted to diet and other remedies in the meantime.

DR. E. J. DOERING said he had not used calomel in eczema, but had had good results from the use of corrosive sublimate. He intends to use calomel, after this, in such cases, and he thought nothing better could be found to use in chronic cases.

DR. J. ZEISLER remarked that he was very much interested

in this paper and, especially, to hear that calomel was useful in eczematous skin diseases. He had always held the view advocated by HEBRA, that eczema was caused by external causes and required external applications for its cure. Calomel might be of use in cases due to syphilis. He would not use blue ointment on young children. He asked whether it would not be best to use some external application in cases where there were thick masses of crusts covering the diseased part, and also whether the author of the paper had found salicylic acid useful in this disease.

DR. C. W. PURDY thought retained excreta a cause of eczema, and called attention to the close relation existing between the intestinal tract and the skin, the condition of the one affecting the other. He had seen cases cured by the use of calomel and would favor this treatment.

DR. J. A. ROBISON said that Dr. Byford had found mercury beneficial in syphilitic and non-syphilitic cases, probably because given in small doses it was a general tonic, as iron or cod-liver oil, increasing the number of red blood corpuscles and enriching the blood. Thus it counteracted any dyscrasia present.

DR. BYFORD concluded by saying that Hebra was doubtless right in saying that eczema is caused often by external causes, but in some cases it was clear to him that the disease is due to causes arising within the system itself. In later years Hebra had modified his ideas of this disease somewhat. Although eczema could be cured by external applications, when so treated it is very apt to return. It is not so when removed by the use of calomel. External medication would often hasten the cure. He did not use salicylic acid. He believed that calomel in these cases acted as an agent causing eliminations as well as being a tonic.

The Society then adjourned.

DEPARTMENT OF HEALTH.

CHICAGO, APRIL 1ST, 1885.

TO THE HON. CARTER HARRISON, MAYOR, AND TO THE
HONORABLE CITY COUNCIL :

I herewith transmit the annual report of the Department of Health of the City of Chicago for the year ending December 31st, 1884.

With this report is also published the statistical report for the year 1883. Such recommendations and modifications of ordinances as I have thought proper to bring before the City Council, during the past two years, for their action, have been sufficiently commented upon, while under discussion, and do not require further reference.

CLEANING THE CITY.

The custom of assigning the cleaning of streets to the care of the Department of Public Works, and the cleaning of alleys and removal of house garbage from alleys and streets to the Department of Health, has resulted in the usual confusion and extravagance of expenditure, which have, heretofore, more or less, characterized the work.

The cleaning of a great city—and keeping it clean—is a labor of enormous magnitude and of the most vital importance, and as there is really no demarcation between filth of the street and filth in alleys, there should be no division of responsibility in its removal, and, in my opinion, one contract should cover the whole. Such a course *should* insure efficiency and economy.

INSPECTION OF FACTORIES, WORKSHOPS AND DWELLING HOUSES has become a very important work of the department, and our diminishing death-rate may be largely attributed to the active supervision and improvement of the houses and places of labor of our laboring classes. This supervision has covered about 263,000 of our population, and the statistics presented by the chief of that bureau will be found of interest. The force has, at this date (April 1st), been increased to eighteen men, and I anticipate much assistance from their services.

STOCK YARDS AND MEAT INSPECTION.

This service, so important to the comfort and health of our citizens, has been satisfactorily performed. The stock-yard district has been the rendering neighborhood for a large portion of the civilized world. The fresh meats slaughtered there are distributed in carcass to all the larger cities of America, while many of the villages or small cities of 10,000 inhabitants or more of the New England and Middle States have refrigerators supplied from the same source.

Large orders have been filled by our packers for preserved meats in tin cans for the use of the English army in Egypt and India (21,559,548 lbs. in year ending May, 1885), and these meats are found in every hamlet of Europe and America.

In 1884, there were slaughtered at these yards 1,025,813 beeves, 3,959,352 hogs, 511,278 sheep; and the blood, bones, feet, scrap and offal of these animals were rendered into grease, glue and fertilizers in so prompt and efficient a manner as to create no offense, unless caused by unavoidable accident to machinery or lack of water supply. Officers of this department are on duty day and night at the rendering houses.

The inspection by meat-inspectors of the department, of animals brought to the yards and designed for food, has given

rise to considerable conflict with owners or commission men, to whom the animals were consigned.

The reputation of the business is so vitally connected with a careful inspection, that the stock-yard authorities and large packers have always sustained the health-officers in a vigorous performance of their duty. All animals regarded as unfit for food are shot in the pens and turned over to the rendering company. Several suits against officers of the department for damages, for loss of stock, have been brought during the year, but abandoned when they reached the higher courts.

On the 28th and 29th of July, two shipments of stock—comprising 964 head—reached the yards, afflicted with the southern cattle fever. Seven hundred and twenty-five were immediately shot and delivered to the rendering tanks. The remaining animals—apparently in good health—were slaughtered, under the inspection of Mr. Lamb, and about forty per cent. of them disclosed evidence of disease, and the carcasses were condemned. The animals had been grazed all summer, along the northern line of the Indian Territory, and were driven to Caldwell, Kas., placed on board cars and taken to Kansas City, Mo. On the day of their arrival at Kansas City, several of them died, and the stock-men becoming alarmed rushed them off to Chicago.

It is presumed that this experiment, which cost the owners \$16,000, will convince them that Chicago is not the most desirable market for stock of this character.

THE RIVER.

The condition of the river has been so satisfactory as to give little cause for complaint. The south fork of the south branch still remains in a deplorable condition. I can only repeat what I had to say in my last report on this point: "There can be no question that this slough of filth coursing

through the southwestern portion of our city, is a terrible menace to the health of our citizens. It not only directly creates disease, but by the septic influence it generates, invites the location and development of such germs of epidemic disease as may be introduced from without."

GENERAL HEALTH.

There is no feature of the Registrar's report which calls for comment. The city has been free from epidemics of every nature, and the death-rate is remarkably low.

OSCAR C. DEWOLF, M. D.,
Commissioner of Health.

BUREAU
OF
TENEMENT AND FACTORY INSPECTION.

OSCAR C. DEWOLF, M. D.,
Commissioner of Health:

SIR:—I herewith present a report of the work performed by the tenement and factory inspectors during the year 1883.

Sec. 1352 of the Municipal Code requires a full and detailed statistical report of the number of males and females of all ages employed in labor or service in factories, workshops, stores, warehouses, elevators, yards and domestic workrooms.

There are about 19,000 of such above named places of employment enumerated in the subjoined tabular statement, and about 200,000 persons employed therein.

The number of adults at the age of working capacity is much greater in proportion to the whole number of inhabitants in this city, which is being constantly crowded with immi-

grants, than in older cities having a native-born settlement of Anglo-Americans, whose enterprising young people emigrate to all parts of the continent in search of more remunerative employment.

The principal business centre of the south division of the city has lately been bounded and confined at Polk street through the location of a railroad terminus; and the Board of Trade building has been erected at the foot of LaSalle street, between Jackson and Van Buren streets.

This encourages builders to erect ten and twelve story blocks for offices, workshops, and living apartments, so as to derive the largest obtainable profits from their investment in building grounds.

One such turret building will accommodate as many persons of employment (over and on top of each other) as an entire block of low business buildings outside the circumscribed business centre.

The detailed reports show that *more* than 60,000 persons are employed at service or labor *above* the first or store floors in the first ward alone (the business centre); the upper floors constituting one vast workshop.

Among the noticeable conditions found in the high buildings, and which are not sufficiently regulated by ordinance, is the lack of proper safe-guards in case of fire or accidents.

These high structures, constantly crowded as they are with human occupants, intermingled with highly inflammable goods, should consist entirely of fire-proof materials, and should be supplied with fire-proof outside stairways, constructed so as to afford safe exits to the vast numbers of architects, printers, telegraphers, cloak, clothing and suit makers, and the multitude of others who are employed in the several professional, commercial or manufacturing pursuits.

The prevailing custom of providing comfortable passenger elevators, together with the cheaper rents and better light and air to be obtained, causes the upper stories of these tall buildings to be much sought for, thus supplying one of the principal inducements to capitalists to erect an increased number of such buildings each year.

However, the convenient elevator has reduced the number of necessary stairways, constructed as they are for *general* use, and with little or no precautions for accidents, panic or fire.

These elevators should be constructed of incombustible material and enclosed within a fire-proof shaft; but this is rarely done—the usual method being, to but partially enclose them with a light wire-netting, or other similar materials, thus providing a sure passage for dense smoke or fire, and rendering this elegant convenience entirely useless at the very moment it is most needed, as a means of escape.

The lower or ground floors only, are used as stores and to show sample goods; all upper floors are workshops, if not offices or furnished rooms.

The style of fire-escape generally used at present is primarily intended for the use of the firemen, who can climb up and connect and direct the hose for a stream of water to the several upper floors; but the employés could not use these perpendicular ladders to safely escape from the twelfth story of a burning building, unless they are professional acrobats.

Iron stairways should be provided within fire-proof enclosures (which could be properly lighted through mica-covered openings), to connect at each floor with suitable *outside* iron balconies, in connection with outside iron stairways, and all provided with suitable railings, etc.

The ordinance prohibiting the employment of children under

fifteen years of age, for more than eight hours each day in factories and workshops, is being very generally complied with.

The classified, alphabetical lists of the trades and occupations are made according to the titles of the employing firms, and not by the articles of manufacture or sale; a more detailed or substantial classification being deemed impracticable, because of the almost universal custom of firms and companies of concentrating several trades and related occupations into one establishment, as printing, binding, lithographing, stationery and general publishing.

The subjoined alphabetical tables fully explain themselves and show an activity and magnitude in the manufacturing industries of this city, not so accurately obtainable from any other known source.

TENEMENT HOUSE INSPECTION.

A thorough examination was made during the year of all the sanitary conditions in 3,744 tenement houses, which contained 9,164 families, consisting of 42,331 persons.

A complete detailed written report is filed in this department for *each* examination made, the action taken, if found in an unsanitary condition, and the improvements effected. From the general character and conditions found in these buildings, filled in many instances with noxious odors from defective drainage, etc., and to twice their statutory capacity, with a class of inhabitants who are not over-clean in their personal habits, it would seem to be almost necessary that a still closer supervision should be exercised over this class of work.

I would suggest that a careful and thorough house-to-house examination be made of all the tenement houses within the city, during the months of April, May and June, of *each* year, in order that the neglected repairs and accumulations of the

winter months may be rapidly and effectually made or removed and a considerable cause for sickness, and possible deaths, done away with. The owners should be compelled to provide suitable and permanent receptacles for the garbage and general refuse of these houses, after which the inspectors should see to it that the occupants make *use* of these receptacles for their intended purposes; also, that the day scavengers remove the contents promptly and regularly. This would require constant and rather unsatisfactory work (for the inspectors) for a few months, but the resulting benefits to the tenants, if not to the general public, would fully justify the necessary expense and trouble; as, no doubt, the occupants would soon adopt the more cleanly habits because of their enhanced comfort, and in a short time follow the suggestions of the inspectors from *choice* and not by compulsion.

In the year 1883, (only two years since,) a comparative statement was compiled in this bureau, of the mortality ratio per thousand inhabitants in the strictly private residence wards and those containing tenement-houses and inferior dwellings.

These comparisons were taken from the "record of vital statistics" of this city, and are therefore reasonably accurate and to be relied upon as correct, and the results show that nearly *three* persons die in the tenement wards for every *one* person dying in the residence wards, and making a further comparison with the *class* of disease (preventable) causing death, the ratio is much greater as against the unsanitary wards. We will not claim that *all* the excess in the mortality is due to the unsanitary *housing* of these people, but conceding that *one-half* is due to insufficient and unwholesome food and excessive manual labor, and we still feel that additional work in this direction may be prosecuted with beneficial results. In the 3,744 tenement houses examined, the inspectors found it

necessary to serve 921 written notices to make *permanent* sanitary improvements in the lighting, ventilating, plumbing and drainage of the buildings. In addition to the work mentioned and shown in the detailed reports, a complete record is made of the number of rooms, families, persons, males, females and children occupying *each* house, which would be of great value and use, should an epidemic spread through the city.

SPECIAL EXAMINATIONS.

There were 1,558 "special" examinations made in residences or dwellings containing one family each, all of which were made upon the written requests of physicians, occupants or owners, or both. This class of work was not at first intended to form a part of the "regular" work of the inspectors; but the public generally are recognizing the true value and benefit to health of perfect house sanitation, and making such rapid strides in voluntary self-education in this direction that it has been deemed consistent to accede to those requests, and suggest proper remedies for all defects found.

It would seem that this "special" work was not the least important one of this department, when it was found that, out of the 1,558 houses examined, 726 were deficient in one or more of their important sanitary conditions, which defects were immediately remedied under the supervision of the inspectors.

At first thought, these facts would lead one to believe that *all* places of habitation should have the same inspection, *regularly* made, as are in the tenement houses; but the facts are, that these "special" examinations are only made upon the written requests of a physician (professionally visiting the premises named), or from the occupant or owner, who has long endured an indescribable odor (generally emanating from defective drainage or plumbing) throughout the house; and,

as a last resort, seeks the health department, that they may be relieved of the cause of their troubles.

SANITARY REQUIREMENTS IN NEW BUILDINGS.

The laws of this state require that the plans and specifications for all places of habitation (in cities of 50,000 inhabitants), shall be submitted to the Commissioner of Health for his approval or rejection, so far as relates to all sanitary arrangements to be provided in said buildings, and includes the ventilation of rooms, light and air shafts, windows, ventilation of water-closets, drainage, plumbing, etc.

Permits have been issued during the year for 2,444 buildings for habitation; the plans for which were submitted to this office for approval, so far as relates to *all* the sanitary arrangements to be placed in the proposed buildings, and copies of 1,389 of said plans were properly filed for reference, and represent all classes of house building, from the smallest cottage house to the palatial residence, and from the ordinary or usual two-flat building to the towering seven-story tenement house.

Of the 2,444 plans submitted, 1,142 were for so-called "flat" buildings (buildings fitted for *one* family only to each story or floor), 294 of which contained stores on first or ground floor; 483 tenement houses, containing *three* (3) or *more* families each, were built, and one, now in course of construction, to contain thirty-four (34) families; 116 cottages (brick) were built to accommodate one (1) family each, and the remaining 702 houses include all classes of one and two family buildings, from the mansion of the millionaire to the hostler's living apartments in the upper story of a barn.

These houses were constructed for the accomodation of 4,551 families, and estimating that each family consists of four persons, we have a total of 18,204 persons, who have received a direct and *permanent* benefit through the exertions of this

department. The method pursued to accomplish these permanent benefits or improvements consists in first compelling all architects, builders and other persons interested in the construction of these buildings (and before commencing work on same), to first submit their plans and specifications to the Commissioner of Health, for his approval or modification as to their sanitary arrangements; and after approval, this bureau enforces all the requirements of the laws, ordinances, rules and regulations relating thereto, by constant and supervisory examinations of the buildings from time to time, during their erection and after completion.

This supervision is found necessary, because many unprincipled persons often attempt to omit necessary conditions or to construct in a much different manner than the approved plans and specifications represent, and in direct violation of the laws, etc., governing the same. The total number of these violations by the architects, builders and plumbers in the *construction* of new habitations during the year were 204, which required the serving of a written notice by this department (for each one), requesting the violators to remedy the work at once, which order or notice not being fully complied with, the whole was carried into the courts where, I am pleased to state, *every case* (and there are scores of them) was decided in favor of this department. Therefore, without *legal* compulsion, through the efforts of competent inspectors, these sanitary improvements could not have been enforced, and the construction of permanently unsanitary house-buildings would have continued as in the past. The importance of, if not the *necessity* for, this class of sanitary work, cannot be better shown than in the preceding statement, that in *one* year alone this bureau has effected permanent and substantial improvements, which directly benefit *more* than eighteen thousand inhabi-

tants; while under the former ordinances these improvements could only have been enforced *after* the buildings were occupied, and then only partially and in an imperfect manner.

As will be seen, nearly one-half of all the houses constructed were of the class known as "flats," and with very few exceptions are rented for \$20 to \$125 per month for *each* flat or family, a sum beyond the ability to pay, of the clerks and so-called middle class of merchants, employés and mechanics in our city.

This brings us face to face with the unpleasant fact, (as mentioned in my last annual report,) that practically *no* provisions are being made to house the *toiling* multitude of wage-workers in our city, and in order that a clerk or other small-salaried man may procure suitable rooms for the proper accomodation of his growing family, he is compelled to travel far toward the city's suburbs and suffer the inconveniences of spending hours each in day going to and from his place of employment in addition to a considerable expenditure of cash. The laboring classes employed about our docks, stores and warehouses in the central portion of the city cannot go to the suburbs, nor any locality of any considerable distance from their places of employment, because of their salary being so small as to preclude them from paying any portion of it for transportation, and so it follows that they are compelled to remain in the down-town overcrowded and poorly-lighted tenement quarters, with immoral surroundings and too generally poor school accomodations for their children. It cannot be questioned but that buildings of four or more stories in height could be erected on cross streets in close proximity to the business centers and arranged in small but light, airy and convenient apartments, most thoroughly provided in a sanitary way, and rented in suites, for 8 to 12 dollars per month for each family, and which would return a *net* percentage on the investment far above an equal

investment in other classes of houses in any portion of the city distant from the trade centers.

If it be possible to build with great profit and *in the most scientific manner*, whole cities like Saltaire and Pullman for the *exclusive* housing of operatives (employés) of large manufacturing and commercial institutions, then why is it not only possible, but highly profitable, and withal a very philanthropic enterprise to erect blocks of tenement houses on the most approved plans for the wage-working poor in this city, and thereby obliterate such localities as the "Patch" and "Cheyenne?" Such an enterprise would abolish these rookeries by causing them to be unsought for as places of habitation; it would improve the morals of our lower classes by improving their surroundings and education and largely reduce the mortality among this class of our populace.

LODGING HOUSES.

The improvement of the so-called lodging-houses in many of the basement or cellar stories along a few of the central streets has been the cause of much labor on the part of this department in forcing the owners to keep them in a fair sanitary condition and prevent excessive overcrowding.

Not a few have have been declared uninhabitable and the owners compelled to permanently vacate them and estopped from further using them for such purposes.

In other instances the entire bedding has been burned or otherwise destroyed and replaced with new, but a less number of beds. However, real, genuine *satisfactory* results cannot be obtained in this class of work until the city ordinances are so amended as to entirely prohibit any person from sleeping or dwelling in any basement or cellar *under any circumstances whatever*.

Respectfully,

W. H. GENUNG, *Chief Inspector*.

BUREAU
OF
TENEMENT AND FACTORY INSPECTION.

OSCAR C. DEWOLF, M. D.,

Commissioner of Health:

SIR:—I herewith present a report of the work performed by the "Tenement and Factory" inspectors for the year 1884, including about all classes of sanitary work of the health department as required by the following ordinance, except the scavenger service and the care of contagious diseases.

Section 686 of the city ordinances declares that, "It shall be the duty of the commissioner of health to enforce *all* the laws of the state and ordinances of the city in relation to the sanitary regulations of the city, and cause all nuisances to be abated with all reasonable promptness, etc., etc.

This ordinance is very general in its character, but there are many others which apply directly to specified unsanitary conditions in all classes of buildings; however these ordinances should be so amended as to provide for abatements in a special manner. This annual report shows a division of the sanitary work into three separate parts, viz:

First. The sanitary work performed in *occupied* places of habitation and which includes *all* buildings wherein any person may dwell or lodge.

Second. The control of the sanitary conditions and safety as relates to egress, protecting machinery and storage of dangerous materials in places of employment or service.

Third. The exclusive control under the state laws of all the sanitary arrangements or conditions, such as the heating, lighting, ventilating, plumbing and drainage to be provided in

every building within the city, during its construction and which is to be used as a place of habitation.

Section 1347, of the city ordinances, declares "that no person shall hereafter erect, or cause to be erected, or converted to a new purpose by alteration, any building or structure which, or any part of which, shall be inadequate or defective in respect to ventilation, light, sewerage or any of the usual, proper or necessary provisions or precautions for the preservation of health."

The state laws invest the Commissioner of Health with authority to control all the sanitary arrangements to be provided in any habitable building within the city.

The enforcement of these laws by the inspectors has been the means of accomplishing more valuable sanitary work than by all other ordinances combined, in that by their enforcement all improvements made are of a *permanent character*, and place the building (except in cases of accident) in a permanently good sanitary condition, thereby benefiting all occupants uniformly throughout the city.

The construction of dark, damp, unventilated living rooms has been wholly prohibited for the past two years. All water-closet rooms are provided with sufficient external light and ventilation and which are never permitted to be in any way directly connected with any habitable room. In fact, all sanitary conditions are enforced which are conducive to the health of the occupants.

During the past year much work has been accomplished in greatly improving the sanitary conditions in a number of our public school buildings, which in some instances amounted to an entire remodeling of the drainage systems and the heating and ventilating apparatus.

One school building was torn down, as recommended by this

department, to be replaced by a larger and more modern structure. This work will be vigorously prosecuted, with the hope of placing *all* the school buildings in the best possible sanitary condition during the present year.

As will be seen from the following tabulated reports, the inspectors have, during the year, made a total of 28,092 examinations in places of habitation and employment, and filled proper detailed written reports for each building and firm. These examinations are exclusive of the work performed under the state laws relating to the sanitary supervision of 3,240 new buildings in course of construction for habitation, correct plans for 1,941 of which have been filed with this department for future reference, but which cannot appear in this report in detail because of the voluminous form of such reports. The owners or occupants of 1,932 houses of all sizes, each containing from one to twenty families, also employés of 483 shops and stores complained during the year of insanitary conditions in the plumbing, drainage, ventilation, etc., existing in said buildings, for each of which a special examination was made by an inspector and the defects properly corrected.

But this number of complaints does not cover half the work of house-inspection, there having been 4,394 houses containing 10,445 families reported in detail, besides the great number of cottages and dwellings which were greatly improved in their permanent sanitary arrangements through verbal notices or suggestions of the inspectors.

The sanitary inspections are made from house to house, but the record of special reports *in detail* covers only the places of habitation found in bad sanitary condition and otherwise contrary to the health-regulations and for the abatement of which a written notice was served. Whenever a sufficient number of officers (inspectors) can be detailed to examine into

the sanitary condition of *all* buildings, then a complete street-list, with every building used for habitation or employment, will be placed on record, in order to show the sanitary arrangements of each and all of them, together with the number, sex, age and nationality of the occupants.

Many portions of the city are in a poor sanitary condition from lack of proper drainage, and this department caused the laying of new street sewers in certain crowded districts of the 5th, 6th and 14th wards ; also compelling the property owners to make proper sewer connections with their houses. In one district in the vicinity of the lime kilns in the southwestern portion of the city, a population of 6,500 persons was benefited through such improvements.

18,438 places of employment (factories, stores, etc.,) were visited and detailed statistical written reports filed as required by law.

The employment of children under fifteen (15) years of age for more than eight hours a day is forbidden by ordinance, and the employers in factories comply with this requirement generally throughout the city. Improvements of a permanent character were effected in 4,229 buildings by all classes, and included the construction, repairs and cleaning of catch-basins, trapping and ventilating of house-drains, sewers, soil and waste pipes, ventilating bed rooms, work rooms, bath and water-closet rooms, supplying light and ventilating shafts, providing adequate water supply to tenements and factories, supplying proper "traps" for plumbing and drain pipes, guarding dangerous machinery, providing proper egress for factory employ  s, removing dangerous material from rooms occupied by factory employ  s, and many others of a miscellaneous character, but not specially named in the inspectors' reports. Very many more improvements were effected through verbal suggestions

of the inspectors and which were not placed on the books of record.

A considerable number of suits were brought against violators for non-compliance with the written notices served by inspectors, but the *ratio* of these suits is decreasing each year.

However satisfactory this work may have been (and the constant decrease in the mortality rate is one proof of the satisfactory results) there is yet much to be done, when it is known that there are 70,000 dwellings [U. S. census of 1880 reports 61,069], and more than 25,000 places of employment, all of which should be regularly examined at stated intervals, as the law provides, by a competent officer of this department who should compel the proper persons to immediately remedy all insanitary defects.

The most varied and complicated work of the inspectors is in the dwellings and tenement houses, more than four thousand of which have been examined and much improved during the year. Nearly all of these houses were located in the so-called "patches" and required the constant attention of all the inspectors for the greater part of the year. As there is about eleven thousand tenement houses in the city, it will readily be seen that there should be provided at least one inspector for each ward, in order to carry out the provisions of the ordinances throughout the city, which covers an area of 36 square miles and contains a population of 650,000, with a yearly increase of 30,000.

Section 1352 of the municipal code requires a record to be kept, and an annual report to be made to the City Council, which shall specify:

1. Number of males and females of all ages employed, also number of boys and girls under fifteen years of age employed.

2. The number of violations of this ordinance regulating the sanitary supervision of all places of habitation and employment, and the number of abatements, with detailed account of improvements effected.

3. General and special sanitary condition of all people in labor or service in factories, workshops, stores warehouses, elevators, yards and domestic work-rooms.

4. Number and kind of dangerous and unhealthy employments, and diseases of the several trades and occupations.

5. Statistics of labor, wages and cost of living, in connection with the several trades and occupations specified in the reports of the factory and tenement house inspectors.

Such reports shall be printed as public documents for the information of the people.

This requires the work of a competent recorder of statistics to classify all these reports, notices, and suits entered by the inspectors, and enter them in proper books of record, also to make weekly and quarterly reports, etc.

In the greater number of buildings erected as habitations for the working classes, the rooms are generally much too small, and the City Council should limit, by ordinance, the size of living and sleeping rooms as to cubic air-space and floor space for each occupant, to guard against preventable sickness from over-crowding.

Thousands of frame houses of all sizes have, in course of time, become untenable through sagging of sills, doors, window frames, and other parts, also rotting of wooden floor-timbers, placed too near the ground, fouling of wooden drains and other causes, exhausting the vitality of the occupants by exposure to the elements at all times in a manner which, in many instances, is far more debilitating on the human system than the work which affords a living. We have no ordinance

compelling the thorough repairing of these old rookeries, shanties and dwellings, so as to prevent the draught through the countless openings made by broken plaster, floors, window glass and "improperly fitted doors and windows," and an ordinance covering this defect should be enacted without unnecessary delay.

The *Act* of May 30th, 1881, for the "Regulation and inspection of tenement and lodging houses and other places of habitation, declares in section 3: that, "it shall be unlawful for any plumber or other person or persons to cover up or in any way conceal such plumbing work in or about such building or buildings until the Health Commissioner approves of the same," and makes the penalty for violation a fine of from one to two thousand dollars for each offense. There is not a shadow of doubt but that this *Act* has been of almost inestimable value to this department in *preventing* the construction of permanent insanitary conditions, and also the means of improving the standard of the plumbing work of this city fully one hundred per cent.; but this *Act* should be so amended as to compel all plumbing to be placed, whenever practicable, in sight at all times and always easily accessible. This would encourage the plumbers to perform better work and to use better material; it would also educate the general public to know good work and material when seen; it would greatly improve the sanitary condition of the habitations, it would facilitate repairs and save much vexatious delay in locating leaks, stoppages, and many damaging defects in the prevailing present method of concealed and mysterious plumbing. At the date of the passage of this *Act*, it was the prevailing habit among many plumbers to conceal a waste or service pipe whenever it was possible to do so, thus offering an opportunity to apply almost worthless work, and still worse material, and providing, in course

of time, a sure means of seriously damaging the building in which it was placed, and making of the whole a complete mystery to any except the person who planned and executed the plumbing work. And this was done, first, because the owner desired to have the work performed as cheaply as possible, meaning perhaps for as little money as possible for what *he* deemed good work, said owner not having a knowledge of *good* work when seen or described; also because the competition among the contracting plumbers was so vigorous as to *seem* to make it necessary to apply the very cheapest material and workmanship in order to leave a living margin for themselves.

Section 2 of this Act provides that, "it shall be the duty of any plumber * * to receive instructions from the Health Commissioner before commencing the work in said buildings, etc., but these instructions relate only to the *method* of doing the work. This section should be so amended as to regulate the *material* used, at least to the extent that it shall be sufficient in size, strength and quality.

The state law or city ordinances or both should be so amended as to provide for metal sewer or drain-pipes for conducting the usual sewage of all places of habitation to some point outside the building walls; said drain-pipes to be in full view at all times, and in no instance to be buried in the earth or in any way concealed or covered up.

In cases where a cellar or excavation of any kind shall be deemed desirable, it would necessitate a double system of drains for sub-soil and storm-water drainage, both of which could be properly connected at some point outside the building walls. However, if the metal system had proper capacity (which would greatly increase the cost) the surface and storm-water and usual sewage of premises could be discharged into street

sewer through this system, and the sub-soil drains could discharge into properly constructed gravel or sand wells or trenches. Too little attention is given to sub-soil drainage in large cities, where the earth is necessarily impregnated with filth, dangerous to health.

I believe that next to the four outside walls of a building the drainage is the most important, for without proper drainage any city building is practically unfit for human habitation. The ordinance relating to drainage should be so specific as to provide for not only the natural sewage of a building and the storm-water falling upon it and the connecting grounds, but should also provide for the sub-soil draining of the entire lot covered by the building to a depth of two or more feet below the foundation walls. Proper provision should be included to prevent the construction of walls in such manner as to become damp from the foundation upwards. Damp air and ground air should never enter a building to fill it with a disagreeable stuffy odor, which is alike unpleasant and dangerous to the health of the occupants. Another and not the least defect in the construction of house-drainage in this city is the universal arrangement of constructing one or more grease-receiving basins for each building.

These are usually constructed of brick in a careless manner, and rarely if ever water-tight, thus permitting the surrounding earth to become thoroughly saturated with the vilest filth. I can see no good reason for not abolishing these cesspools, which require constant attention and care to remove and bury their accumulating filth, thereby causing a very disagreeable if not dangerous stench for many hours during removal, or if permitted to over-accumulate, the drain becomes choked and the entire sewerage of the premises is necessarily discharged on the surface of the ground *under the building*.

This improvement, if made compulsory by law, would very much improve the general sanitary condition of habitations almost if not quite equally with the abolishment of the construction of privy vaults.

The sewage from a building of any kind, and especially a place of habitation, should be quickly removed from the premises to a point beyond the drain trap and into the street sewer, to prevent dangerous gases being generated from decomposing matter found in all drains. Any substance permitted to enter a private sewer or drain should never be retained in a "catch-basin" or cesspool a long enough time to allow it to become a mass of putrid decomposition, for this is the principal creator of sewer gas in houses. There is but one proper way to prevent this; that is, to prevent the accumulation, by prohibiting the construction of such cesspools, each with a capacity of several hundred pounds of filth.

Much thought and attention has been given to the proper housing of the renting public and more especially the working classes, such as clerks, book-keepers, mechanics, etc. The great expense precludes the erection of *small* tenement quarters provided with modern conveniences and thorough, necessary sanitary arrangements, except in large blocks.

And for many other reasons this would seem to be at least a partial solution of the problem of "what can best be done to provide proper homes for the renters?"

The practical application of this theory would appear in the plan of a model tenement block, similar to the following:

Taking a piece of ground, say 125x125 feet, running to an alley, there could be erected thereon a large fire-proof building in the form of a hollow square, and composed of a basement or cellar for storage purposes and heating and laundry apparatus; next, a high story for stores, shops, etc., with dwelling

apartments in rear; then four or more stories to be used exclusively for tenement apartments, the top or attic story to be used for storage and drying rooms, or play rooms for children if desired. Such a building could be constructed in such a manner as to provide external light and ventilation for each and every room. The apartments to be so divided as to provide from two to four rooms with necessary closets for each family.

The water-closets could be erected in tiers (4 in number), one over another, with external light, and an adequate shaft artificially ventilated. A strong but airy iron balcony could encircle the large court at each floor, with connecting iron stairs for escape from fires or other accidents.

Suitable and sufficient elevators could be provided for use of occupants and for elevating fuel, etc. A janitor-engineer would have entire care and control of the entire building, to see that all its several mechanical parts were kept in perfect working order.

A building of this character, as compared with the present three-story tenement house, would produce a revenue in excess of the old style building exactly in amount to all rents received *above* the third story, and all these fourth and higher stories occupy the *same* ground as the lower ones, and therefore cost nothing for that item of expense.

By the use of elevators, the upper apartments are quite as accessible as the lower ones, and the building being fire-proof, makes them quite as safe and certainly more desirable and pleasant, because of better light and air, and being far removed from the dust, noise and bustle of the adjoining street.

In the present style of tenement building without a janitor's care, much trouble is caused to owners and occupants through careless and malicious actions of an unsanitary character; but

which would be obviated in a large tenement block where *all* arrangements in common use by tenants are under the supervision of a competent person responsible to the owner, which owner is responsible to the health authorities. Such tenement blocks should be erected in or within easy distance of the commercial and manufacturing centres, to save expense of transportation to the employés, and also the time of going and coming to and from their places of employment; also that his family may have proper police protection and live within a reasonable distance from schools.

The moral benefits derived from the construction of such tenement blocks, with the privacy they afford to each and every family, can hardly be over-estimated, when taken into connection with the more cleanly personal habits to be obtained under these healthful surroundings.

The sense of shame becomes blunted in overcrowded, filthy, and ill-arranged apartments, and children become exposed to bad examples, which are apparently easier to follow than good precepts. It would seem proper that our large employers of labor should start this new departure in building tenement blocks for their multitudes of employés who would gladly remain their tenants.

The builders of these large blocks would greatly benefit the community at large by compelling the owners of inferior buildings to improve them to a proper standard of comfort and accommodation.

Respectfully,

W. H. GENUNG,
Chief Inspector.

REPORT
OF THE
REGISTRAR OF VITAL STATISTICS.

TO OSCAR C. DEWOLF, M. D.,
Commissioner of Health :

SIR :—I have the honor to present herewith the following annual report for the year ending December 31, 1883.

There occurred during the year 11,555 deaths—a weekly average of 222. Of this number there were born in Chicago 6,257, and 1,554 elsewhere in the United States. There were 1,423 natives of Germany, 900 of Ireland, 150 of Canada, and 191 of England ; 993 were natives of other foreign countries. One was born on the Atlantic Ocean, and one on the Mediterranean Sea, and the nativity of 85 was unknown.

Of the decedents, 3,850 were infants under one year of age, and 5,875 were children under five years of age, making 50.84 per cent. of the total mortality under five years of age. There were 1,121 over sixty years of age, including one over one hundred.

The death rate for the year was 19.26 per 1,000 inhabitants, estimating the population at 600,000.

Respectfully submitted,

M. K. GLEASON, M. D.,
Registrar.

MORTALITY REPORT
OF THE CITY OF CHICAGO
FOR THE YEAR ENDING DECEMBER
31ST, 1884,

TO OSCAR C. DEWOLF, M. D.,
Commissioner of Health.

There occurred during the year 12,471 deaths—a weekly average of 240, and during the preceding year 11,555, a weekly average of 222.

Of this number, in 1884, there were born in Chicago 6,997, and 1,537 elsewhere in the United States. There were 1,495 natives of Germany, 922 of Ireland, 157 of Canada, and 217 of England; 1,069 were natives of other foreign countries. One was born on the Atlantic Ocean; and the nativity of 76 was unknown or not given in the certificates of death.

Of the decedents, 4,179 were infants under one year of age, and 6,666 were children under five years of age; making 53.45 per cent. of the total mortality under five years of age. There were 1,208 over sixty years of age, including two over one hundred.

The death rate of 1884 was 19.80 per 1,000 inhabitants, on a basis of 630,000 population, according to the school census taken in July of the same year. The death rate of the preceding year was 19.26 per 1,000 inhabitants, estimating the population at 600,000. The average death rate for the last five years was 21.96 against 18.51 for the preceding quinquennial period.

For further detailed statistics relating to causes of death, by wards and months, ages, nativities, sex, color, still-births, and social conditions, reference is made to the accompanying thirty pages of the report.

The best criterion of the sanitary condition of a community is best ascertained by showing the percentage of zymotic diseases and the number of deaths under five years of age, compared with the total mortality.

There were 4,216 deaths from zymotic diseases in 1884, making 33.81 per cent. of the total mortality for that year, against 3,666 deaths from similar causes, and a percentage of 31.73 for the year 1883.

In 1884, the greatest mortality from these causes occurred in the Sixth Ward, being 665 or 12.12 deaths to 1,000 population against seventy-three in the Eighteenth Ward (where the least mortality took place), with only 2.68 deaths to every one thousand of its population. Again, in the Sixth Ward, the percentage of the preventable diseases amounts to 42.82 of the total mortality, whilst that of the Eighteenth Ward is only 27.34 per cent.

In 1884, there were 1,111 deaths of children under five years of age in the Sixth Ward, making 71.54 per cent. of the total mortality, whilst in the Eighteenth Ward the percentage amounts to only 44.57.

M. K. GLEASON, M. D.,
Registrar of Vital Statistics.

HEALTH DEPARTMENT.

SMOKE INSPECTOR'S REPORT.

TO OSCAR C. DEWOLF, M. D.,
Commissioner of Health.

SIR:—Having been assigned, in addition to other duties, to the enforcement of Sections 1650, 1651, 1652 of the municipal

code, known as the Smoke Ordinance, I respectfully submit the annexed report of my efforts to rid the city of this nuisance.

LOUIS MERKI,
Inspector.

SMOKE INSPECTOR'S REPORT FROM JULY 1882, TO DECEMBER
31, 1884.

Notices served to abate smoke nuisance.....	2,014
Personal visits made and violations observed.....	1,620
Complaints made by communications.....	264
Complaints by persons in office.....	130
Abatements of the nuisance.....	614
Abatements not satisfactory.....	89
Suits commenced (but not prosecuted) nuisances abated..	268
Suits prosecuted.....	83
Estimated number of boilers in use in city.....	6,000

The Smoke Ordinance was passed by the City Council, April, 1881. Following is a copy of the Ordinance:

"SECTION 1650.—The emission of dense smoke from the smoke stack of any boat or locomotive, or from any chimney anywhere within the city, shall be deemed and is hereby declared to be a public nuisance: Provided, that chimneys of buildings used exclusively for private residences shall not be deemed within the provisions of this ordinance."

"SEC. 1651.—The owner or owners of any boat or locomotive engine, and the person or persons employed as engineer or otherwise, in the working of the engine or engines in said boat, or in operating such locomotive, and the proprietor, lessee and occupant of any building, who shall permit or allow dense smoke to issue or be emitted from the smoke stack of any such boat or locomotive, or the chimney of any building within the corporate limits, shall be deemed and held guilty of creating a nuisance, and shall for every such offense be fined in a sum not less than five dollars nor more than fifty dollars. Sections 1650, 1651, and 1652 shall take effect and be in force from and after May 1, 1881."

"SEC. 1652.—It shall be the duty of the Commissioner of Health and the Superintendent of Police to cause Sections 1650 and 1651 of this article to be enforced, and to make complaint against and cause to be prosecuted all persons violating the same."

Since the passage of the foregoing ordinance there have been over two thousand notices served to abate smoke nuisances. During the same period there have been seven hundred smoke-preventing appliances attached to furnaces, of which fully six hundred are now in successful operation ; all doubt as to the feasibility and legality of the ordinance have been dispelled, and business men generally are beginning to appreciate and approve the necessity of the ordinance. Eighty-three suits have been prosecuted against violators of the ordinance, but in all cases the nuisance was abated before the day set for trial. I have at all times endeavored to abate the nuisance rather than cause fines to be imposed. Great progress has been made within the last two years by the improvements of smoke-preventing devices and the invention of new ones ; nowhere in the United States have they attained such a state of perfection in so short a time as in the city of Chicago. I have personally examined within two years over sixty different devices, but only six of them have proved successful, and each of the six now in successful operation differs in merits generally, but all abate the smoke nuisance. A great aid to any device is careful and judicious firing ; but this essential requirement is wanting in three boiler-rooms out of every four. First, only practical engineers should have charge of boilers and furnace-rooms. More fuel is wasted in many buildings than the salary of two engineers amounts to by unskilled firing. I find men in charge of boiler-rooms under buildings, where hundreds of people congregate daily, that do not know the difference between a direct and a return-flue boiler (thanks to the inventor of safety-valves). All they know is to fill the furnace full of coal and watch the steam gauge and peruse cheap works of fiction, often being so ingrossed in the contents thereof that the furnace is reduced to ashes, and the steam run down before

firing ; then overfeeding the furnace to get steam, these chimneys vomit 15 to 20 per cent. of the coal in the form of smoke into the air. A good, skilled fireman or engineer is half of any smoke consumer, unless it be an automatic one. Another cause of neglect in engine and furnace-rooms is the indifference of owners and proprietors to include daily the furnace-room in their rounds through their business offices. It may not only have a tendency to prevent the emission of dense smoke, but the coal bill may be reduced by these observations. The fuel should always be near the furnace, so that in firing the furnace doors are not kept open longer than absolutely necessary. It will also keep the fuel warmer and result in combustion more readily. Firing should be performed often and light, to insure perfect combustion, thereby getting the full benefit of the fuel consumed. With the devices now in use all grades of soft or bituminous coal can be successfully used for steaming purposes, and conform to the requirements of the smoke ordinance. Citizens generally should observe the following rules in selecting a device :

First. Its application to your furnace and cost.

Second. Its durability and fuel consumption.

Third. Its steaming capacity and effect on boiler and furnace.

Fourth. Does it prevent the emission of dense smoke?

The construction of a furnace, boiler-settings, grate-bars and draught are essential points, and it is with a degree of pleasure that I observe this improvement within the last year in new buildings erected, and those now in course of construction. An engine and furnace-room should be large and well lighted and ventilated. It should be made attractive instead of a dungeon under a sidewalk or in a sub-cellar, without light or air, where the heat is so intense and air so stifling that firemen are

often obliged to leave their furnace-rooms for fresh air. This condition of affairs exists to an alarming extent in our business blocks and workshops, and is in many places ample excuse for neglect. As a whole, the results for the last two years are apparent to every citizen, and with continued enforcement of the ordinance the once great source of the smoke-nuisance will be a thing of the past.

Very respectfully,

LOUIS MERKI,

Inspector.

BOOK REVIEWS.

ON A NEW METHOD OF RECORDING THE MOTIONS OF THE SOFT PALATE. *By* HARRISON ALLEN, M. D., *Professor of Physiology in the University of Pennsylvania. Extracted from the Transactions of the College of Physicians of Philadelphia. Third series, volume vii. Octavo, pp. 34. Philadelphia: P. BLAKISTON, SON & CO. 1884.*

Within the few pages of this monograph are comprised the results of very many hours of patient toil and highly original research. A straight rod, eight inches in length, is passed through the nose, from before backward, until its bulbous extremity reaches into the naso-pharynx. The end which remains without the nostril is then elevated so that the rod is brought in contact with the anterior nasal border, and it is there retained by a wire attachment to a head-band, such as is ordinarily employed for the support of laryngeal head-reflector. With the rod in this position, each elevation of the

palate which is caused during phonation and by the acts of exhaling, coughing, deglutition, etc., produces a corresponding depression of the external end of the rod, and *vice versa*. The free end of the lever is brought in contact with the carbon covered cylinder of the Ludwig kymographion, and the cylinder is made to revolve by means of the clock-work of the apparatus, when there appears a distinct tracing, similar to the markings of a sphygmograph.

Just as the sphygmographic tracing indicates the character of the pulse wave, so the tracing of the Palate-Myograph, as the new apparatus is designated, correlates with the varied movements of the soft palate in the articulation of the different sounds of vowels, different letters, words, and phrases.

It is suggested that the palate-myograph may prove useful in studying the mechanism of the soft-plate in disease as well as in health: in determining the degree of degeneration of the levator palate muscles in progressive dry aural catarrh, for the study of stammering, and for the detection of paralysis of the palate. It is also more than hinted that the method may be made available for the comparative study of language, for the instruction of the deaf, and for the formation of a system of logography.

W. E. CASSELBERRY.

A HAND-BOOK OF PATHOLOGICAL ANATOMY AND HISTOLOGY.
By FRANCIS DELAFIELD, M. D., AND T. MITCHELL PRUDDEN,
M. D. *Published by* WM. WOOD & Co., *New York*.

The authors in their preface claim the present work to be a second edition of what has been known as "Post Mortem Examinations and Morbid Anatomy, by Francis Delafield." So much new material has been added that it may properly be regarded as a new work rather than a new edition of an old one.

The subjects discussed by the authors are comprised in four parts. The first is devoted to a description of the method of making post mortem examination, both of the adult and of new-born infant, as well as of cases of suspected poisoning. The methods of preserving and preparing tissues for future study is also given here.

The second part embraces the subjects grouped by other authors commonly under the name of *general pathology*. In this part there is very much that is new, or not to be found in the first edition.

The third division embraces the morbid anatomy of the organs, and the fourth, "lesions found in the general diseases ; in poisoning and in violent deaths."

Much must be said in praise of this work. It describes briefly, clearly and pleasantly a great variety of lesions. It is unusually well illustrated. The cuts have been made by processes of photo-engraving, from drawings, by the authors themselves, from actual specimens. They are particularly good as drawings of microscopical objects.

A single volume covering so extensive a subject as this can not be so exhaustive as the more extensive and complete works, such as we already have. It will, however, be found both by students and practitioners an excellent hand-book.

The subject of inflammation is not treated of as we ordinarily find it in other works on pathology, and we think the new method is not commendable. No description is given of typical inflammation, but eight varieties are described separately. A student beginning the study of pathology with this text-book would probably wonder why these eight different lesions were called inflammations and what there was in common to them all. They are all *products* of inflammation. In order to make this manifest it would have been better to have

pointed out distinctly the factors common to all, and then to have made plain the differences which constitute these varieties.

The appearance of the latter portion of the book, especially, is marred by the amount of blank paper that is left at the top and bottom of some pages. For instance, gout is discussed in nine lines, which is all the printing that is placed on one page. The book might have been much smaller, without sacrificing the subject-matter, if such blank spaces had been omitted.

N. S. D., JR.

MINOR SURGICAL GYNECOLOGY. A TREATISE OF UTERINE DIAGNOSIS, AND THE LESSER TECHNICITIES OF GYNECOLOGICAL PRACTICE, INCLUDING GENERAL RULES FOR GYNECOLOGICAL OPERATIONS AND THE OPERATIONS FOR LACERATED CERVIX AND PERINEUM, AND PROLAPSUS OF UTERUS AND VAGINA. By PAUL F. MUNDÉ, M. D. *Octavo*, pp. xxii, 552. *New York*: WILLIAM WOOD & CO. 1885. *Chicago*: W. T. KEENER.

The second edition of Dr. Mundé's MINOR SURGICAL GYNECOLOGY supplies a want felt for a long time by every practitioner who has given attention to the diseases of women. The details of gynecological technique and practice are faithfully described, in terms which every one can comprehend. The labor involved in the preparation of such a book is simply enormous. Dr. Mundé has placed the profession under lasting obligation for the production of a book which has no peer in German, French or English.

The book is not without faults; omissions are numerous. BANDL's methods of treatment of uterine inflammations deserve consideration. DR. D. BERRY HART makes the follow-

ing assertion in his "Atlas of Female Pelvic Anatomy" with reference to the genu-pectoral posture: "There is no assertion more often made than that the retroverted unfixed uterus becomes replaced, *i. e.*, anteverted, when the genu-pectoral posture is assumed and the vaginal orifice opened up. This is an undoubted error. The uterus really moves further from the pelvic outlet, and becomes more retroverted." While Dr. HART's statement may be taken *cum grano salis*, it deserves attention.

In the selection of terms, and structure of sentences, there is room for criticism. Finally, the nominative case of the pronoun of the first person recurs with a frequency at once unpleasant and in bad taste.

W. W. J.

A TREATISE ON ABDOMINAL PALPATION, AS APPLIED TO OBSTETRICS, AND VERSION BY EXTERNAL MANIPULATIONS. *By* A. PINARD, M. D., *Associate Professor in the Faculty of Medicine of Paris, etc. Paris, 1878. Translated by* L. E. NEALE, M. D., *Chef of the Obstetrical Clinic and Demonstrator of Obstetrics in the University of Maryland. 12mo, pp. 101. New York: J. H. VAIL & Co. 1885.*

The *raison d'être* for Dr. NEALE's translation of PINARD's lectures on Abdominal Palpation is obvious. We have many excellent English text-books on obstetrics, but no adequate exposition of abdominal palpation as practiced in Austria, France and Germany. The papers of MUNDE, RICHARDSON, WRIGHT, CHADWICK and WILSON, while meritorious, have not supplied the hiatus.

We venture to predict for the brochure before us, great practical utility to the profession, and extensive adoption as a text-book.

W. W. J.

The author tabulated the symptoms occurring in true syncope and nervous paroxysm, as follows :

TRUE SYNCOPE.

1. Often preceded by a feeling of oppression about the epigastrium, or nausea and general malaise. Patients feel the attack coming on.

2. Pallor, vacant expression of countenance, and mental calm in the beginning, with dullness of special and general sensation.

3. Muscular relaxation.

4. Dyspnœa, if any, not distressful—objective rather than subjective.

5. Unconsciousness absolute.

6. Unless fatal, attack passes away rapidly, especially if patient in recumbent position.

7. Temperature normal or below (unless elevated by disease).

8. Seldom recurs if head be kept low.

9. Heart's action greatly depressed.

10. Seldom very disagreeable recollections of distress during the attack.

11. Stimulants afford relief.

NERVOUS PAROXYSM.

1. Often preceded by nervous irritation, heaviness about the stomach, and frequent desire to take a deep inspiration (gaping); sometimes by a feeling of nervous exaltation, or equanimity greater than usual. Onset is usually sudden.

2. Pallor, anxious countenance, mental distress in the beginning, with acuteness of special and general sensation.

3. Muscular rigidity or activity.

4. Dyspnœa distressful—more subjective than objective.

5. Seldom absolute unconsciousness, mental confusion or incapacity.

6. Passes away gradually, more rapidly if head and shoulders be elevated.

7. Temperature normal or above.

8. Usually recurs, or threatens to recur shortly, even if patient lie down.

9. Heart's action irregular, spasmodic, and only moderately depressed.

10. Very disagreeable recollections of distress during the paroxysms.

11. Stimulants aggravate.

Hysteria, uræmia, the action of remedies, etc., may complicate and obscure the symptoms in any given case. The treat-

ment calls for counter-irritation, cool air, cold drinks, massage, antispasmodics, for the paroxysms; afterwards, a removal of the cause, if possible, and measures for the restoration of good health.

DISCUSSION.

PROFESSOR J. H. ETHERIDGE: I would like to ask DR. BYFORD what he would think of the use of hypodermic injections of digitalis under such circumstances; to ask if any one has ever used it in cases of acute syncope; and why it would not be a good thing to make use of?

DR. H. T. BYFORD: In these attacks I believe digitalis would perhaps hardly be the remedy, for the condition is one of reflex irritation, I think. I think it is a case of spasmodic contraction of the heart, and that any nervous symptoms are the result of a contraction of the arterioles of the brain rather than a falling off in the force of the circulation, and that stimulants, such as digitalis, would be liable to do harm. This class of cases I have considered really attacks of convulsions, in which consciousness is not lost, if such a thing can be admitted. In these cases consciousness is not lost; sometimes there is a partial loss of consciousness, spasmodic contraction of the diaphragm, the breath almost entirely cut off, and I suppose the same spasmodic condition of the heart; and sometimes, and in some of the cases referred to, there was rigidity of the muscles; one patient tried to throw herself out of bed. In real syncope the attacks involve loss of consciousness, and relaxation of the muscles. DR. G. NEWKIRK has informed me that he formerly treated cases of malaria wherein the onset was marked by symptoms such as have been described. These cases, occurring in a malarial district, were characterized by a foul stomach, due to the presence of acrid ingesta. Free vomiting, spontaneous or induced, nearly always gave relief.

PALATABLE THERAPEUTICS was the subject discussed in a paper read by Dr. FRANKLIN H. MARTIN. He exhibited specimens of drugs manufactured in the form of pills, capsules, granular salts, elixirs, et cetera, either tasteless or palatable. In his paper, DR. MARTIN claimed that many of the greatest improvements in therapeutics have been gleaned from the field of charlatanism. Electricity, massage and the "Swedish movement" have been wrested from this domain, and placed upon a legitimate and scientific basis. The author claimed that homœopathic medication had three valuable characteristics, palatability, harmlessness and inexpensiveness to the patients. This combination, absolutely without medical merit, accounts for the so-called success of homœopathy. If we can secure palatability to our remedies, we will do much to overcome the popular aversion to our medicinal preparations. Since 1817, when morphia was first isolated as an alkaloid, a great advance has been made in discovering the active principles of drugs. Of the alkaloids there have now been discovered twenty-two, with actions similar to the parent drugs. They are manufactured in pill form and are more easy of administration than the disagreeable preparations from the crude drugs. Twenty glucosides have been similarly isolated and manufactured. While this branch of pharmaceutical chemistry is yet in its infancy we can confidently look forward to the day when the active principles of all the organic drugs will have been discovered, isolated and manufactured into palatable preparations. To-day, the salts of various metals, solid extracts, the bromides and iodides, chloral hydrate and the oils can all be administered in capsules. DR. MARTIN claimed to be the first to suggest the enclosing in capsules solutions of chloral in oil. We can summarize the means by which we can make medicines palatable, as follows: The administration of alkaloids, solid ex-

tracts, crude drugs of small bulk, and various salts in capsules or gelatine or sugar-coated pills; the administration of glucosides and neutral principles in gelatine or sugar-coated granules; the administration of tasteless liquids in water; the administration of oils, oleo-resins, oleates and drugs soluble in oil in soft elastic gelatine capsules; and the administration of medicines by the hypodermic syringe, suppositories and inunctions.

DISCUSSION.

DR. J. J. M. ANGEAR: The object of the paper is certainly commendable. I think the latter part of the paper is valuable, where is urged upon us the necessity of discarding these nauseating remedies and availing ourselves of the science of chemistry, and we should take the admonition to ourselves. I think we are injuring ourselves and our profession by prescribing such crude material when we might avail ourselves of more modern and elegant remedies.

DR. R. TILLEY: There is an inference, of course, even more manifest than appears in the title of the paper which was read to us, that we are indebted more or less to the homœopathists for the advance which we have made in the years gone by in the administration of medicines in a more palatable form. I claim, most emphatically, that such is not the case. The advance which we have made in this respect is to a large extent due to our chemists, and we are willing to accord to them the credit which belongs to them, but we are not willing to accord this credit to the homœopathists. Certainly we have all taken this subject into consideration; we have all given morphine, atropia, etc., when desired. All of us have, I am sure, been trying our best to render these medicines as palatable as possible. There are, however, a few recommendations in the paper which I think would be most objection-

able. For instance, I dare say few experienced men would dare to give iodide of potassium in large doses in capsules. I always recommend large quantities of water to be taken in connection with iodide of potassium. Then with reference to arsenic and antimony, we are told they can be administered in solutions in teaspoonful doses. We all know that, but I question whether it is desirable. I have always recommended the administration of arsenic in large quantities of water, and also tartar emetic. As to the administration of chloral in oil in capsules, I think the Doctor can claim the credit and have all the honor associated with it. There is one thing I would like to refer to, that is the administration of permanganate of potassium in capsule form. I have known it to be so administered in two or three cases, with very severe pain attending the administration, but I have never administered it in that way myself.

PROFESSOR J. H. ETHERIDGE: I think the paper is a very timely one, it is full of a great many good points, but I think there is an objection to the administration of concentrated remedies, especially these alkaloids, in gelatine covers and sugar-coated pills. It sometimes happens that after they have been administered they do not dissolve, and then we get a terrific effect by a half dozen dissolving at once, and in some cases they do not dissolve at all. I recall a case where it was decided to give a child thirty-five grains of quinine; seven capsules were administered and three of them passed the rectum untouched. They may not always promptly dissolve, and the consequence is we run a very great risk of injuring our patients.

DR. A. H. FOSTER: I am glad we have arrived at the point where our profession has learned to give less medicine, thus it is more palatable. Another thing, it is time that we began giving medicine more palatably by giving it in smaller

doses, and we will often get a primary and not a secondary effect from our remedies, and will not get that terrible perturbation that we would if we gave large doses. Some of us have to deal with very delicate stomachs; that class of my practice which is more in the middle of the west side is more delicate than on the outskirts where they live more rough and ready, and I have to be a great deal more careful with these people who live more centrally, and make the doses smaller and more frequent to get the desired effect. But the point that I wish to make is, that we can and do have to study the palatability of our remedies. Another point*, that we have learned to simplify our remedies. I have had more than one physician prescribe in my family, and I always got along best with the one who didn't fire off shot-gun prescriptions. We very often fire shot-gun prescriptions, putting in cathartics and nervines into the same prescription; I would rather it would be one thing at a time and for a definite purpose.

PROFESSOR D. A. K. STEELE: There are a good many valuable points in this paper, and I think the criticism has pretty effectually squelched the objectionable ones. The author claims very valuable points from homœopathy; first, the palatability of their remedies; next, their safeness, that there is no danger in their remedies. That element of safety in prescribing we have applied in our own treatment, some of us, not from belief in homœopathy, but from unerring experience. After having almost killed a few patients in my early months of practice, with large doses and polyglot prescriptions, I came down to smaller doses and found them much safer. Now in reference to some of the objections that may be urged against palatable remedies; the objection to pills is their insolubility, the fact that they pass through the alimentary canals unchanged. I have repeatedly found them undissolved; found

that in administering quinine in that form I did not get the desired result. I think the author made a mistake in giving too little credit to our pharmacists for the advances made in pharmacy in late years. The essential point of the paper, to my mind, is the fact that it impresses upon us the importance of giving less medicine and of giving it in a more palatable form.

DR. C. E. WEBSTER: There is a point we can learn from homœopathy, one lesson which, it seems, has not been touched upon, and that is that in the vast majority of ordinary acute diseases, careful nursing and absolutely inert remedies bring very creditable, if not the best, results; inert remedies which simply occupy the attention of the patient, will produce favorable results. This is the important and only lesson that can be learned from homœopathy.

DR. R. TILLEY: Dr. Foster seemed to imply that we get our tendency to give small doses from the homœopaths. I take the opportunity of saying that in the large hospitals in Paris and London, they have placed patients with acute affections side by side, and to the one they have given all the medicine they have thought necessary, and to the other they have given careful attention and nursing, with the suggestions a practical physician would give, and there has been practically no difference in the result in the two classes of cases. Experience has taught us to give in certain cases, or in many cases, simply a teaspoonful of water occasionally, and that is very important especially in children; a teaspoonful of water is frequently all that the child needs, although few people seem to realize the fact.

DR. DOERING: I object to crediting homœopathy with what science and chemistry have accomplished. Take the alkaloids, they have all been discovered in Germany, where homœopathy cannot live at all,—where they have not a single chair in

any university. I think the paper would be much more valuable if all the reference to homœopathy had been omitted. Palatable medicines are simply the natural result of the advance of the science of medicine, chemistry and pharmacy.

PROFESSOR C. T. PARKES: I recall one instance which illustrates the fact that palatable medicines are not always innocent and harmless. I was called to make a post-mortem examination on a boy six years old. Upon opening the abdomen I found in the abdominal cavity a round mass, and upon examination of this round mass it was found to be a sugar-coated quinine pill. These were also found in the vermiform appendix and had ulcerated through into the abdominal cavity. So far as my opinion as to homœopathy is concerned, I wish to go on record as agreeing entirely with DR. DOERING.

DR. F. H. MARTIN closed the discussion by saying: In regard to the iodide of potassium, DR. TILLEY mentioned that he always gives iodide of potassium diluted in large quantities of water. When I was considering iodide of potash, I recalled the experience that I had myself in administering it, so I diluted the drug after getting it into the stomach; that is, I gave the patient water after he swallowed the capsule, and he experienced no trouble. In regard to permanganate of potash, it is not necessary to give it in capsules,—the oleate of manganese can be used by inunction, or the permanganate of potash be given in distilled water. In regard to the solubility of these pills, any of the best pills will dissolve in water in such a way that the remedies will become free in three minutes. If a capsule or pill of morphia be put in cold water, you can taste the morphia after it has been in the water not longer than two minutes, and you can readily see that by putting the pill into the stomach the gastric fluid, the temperature, and the muscular action, would soon cause its solution. In regard to

the suggestion made by DR. WEBSTER, that the only lesson to be learned from homœopathy was the fact that a large per cent. would recover without remedies, I think I included that in my citing homœopathy as a lesson in general, for we all know from the success of homœopathy, if all their patients had died, or the majority of them had died, homœopathy would have gone out of existence immediately. But it was not the case, and it was taken for granted in the paper that the palatability and harmlessness of their remedies was the first great lesson of the evening and the paper. In regard to quinine pills, some time ago I believe that medicine was put up with sulphuric acid, and it lost strength and became almost inert, but now they put quinine up in excipients that will dissolve readily, and, also, loosely in flexible capsules.

The Society then adjourned.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, November 16th, 1885.—The PRESIDENT, C. T. PARKES, M. D., in the chair.

A REPORT EMBODYING TWO HUNDRED CASES OF TONSILITIS, was the title of a paper read by DR. J. M. G. CARTER, of Waukegan, Illinois.

After detailing the treatments which had been employed in the cases, the author advanced the theory that since the great majority of the cases occurred during March, April and May, when northeast winds prevailed, carrying landward more moisture from Lake Michigan, these winds must be one of the casual factors in the production of tonsilitis. Also, the test for ozone during these months showed a greater percentage of ozone in the atmosphere. Another fact was noticed, that a great many cases occurred in rheumatic patients. The author

was of the opinion that the epidemic of cases detailed was due to the damp northeast winds, containing an excess of ozone, and to unusually disturbed electrical conditions of the atmosphere. The author grouped the two hundred cases, without classifying them, into cases of simple, diphtheritic or scarlatinous tonsillitis. He mentioned, however, the fact that cases of simple tonsillitis were often accompanied or followed by attacks of diphtheria or scarlet-fever among other members of the family.

DISCUSSION.

PROFESSOR F. O. STOCKTON said: We have tonsillitis in nearly all the eruptive fevers, usually following, and occasionally preceding them. The author refers to cases having diphtheritic patches on the tonsils; I think he has confounded these diphtheritic cases with what we specialists call follicular tonsillitis. It is not a diphtheritic condition at all, but resembles it very greatly, so that in a differential diagnosis these cases are very often confounded. In regard to the temperature going up to 104, it is my experience, and that of authorities such as Cohen, Bosworth and Robinson, that it ranges from 102 to 103, seldom more than 103, usually 102. In the treatment of tonsillitis I have never found a gargle effective. In diphtheria or acute tonsillitis you can give chlorate of potash, or any other drug, but where a man has a pain in the angle of his jaw and a throat so sore he cannot swallow, if you can get him to gargle you can do more than I can. Ice held in the mouth until it dissolves is good, also powder or tincture of guaiac and tincture of aconite internally, but never give more than three doses of aconite in one day. Occasionally, if you see a case is going on to suppuration, use hot applications externally and internally in the way of steam, otherwise never use hot applications. My idea is that heat promotes conges-

tion more than cold, and my experience is that where cases are treated, some with cold and others with hot applications, that the cold in connection with other treatment, guaiac and tincture of aconite, is most successful. We ought to settle this question of tonsilitis. What is acute tonsilitis, and is there such a thing as acute tonsilitis? To me it is a misnomer. The abscess seldom forms in the tonsil, it is behind it in the loose connective tissue; and in opening it we cut behind or above the tonsil.

PROFESSOR C. W. EARLE said: I would like to ask Dr. Carter if there was any appearance of contagion in any of the cases?

DR. J. M. G. CARTER said: Frequently the disease will attack everybody in the family, old and young, and just as frequently but one or two in the family will have the disease. It sometimes appears to be contagious.

PROFESSOR G. C. PAOLI said: Tonsilitis is a very common disease in Chicago, especially among children. It is certain that there are different degrees of tonsilitis; there are light cases in which very little medicine is required, and again there are strumous children who are very susceptible to the changes of weather, and in inclement weather get wet and have tonsilitis. In some cases one tonsil is affected, in others both, or the pharynx. There are grave cases that cannot be cured in one week, or two, cases that develop into hypertrophy of the tonsils. In regard to treatment: a light case does not require ice, and a person with malignant scarlatina with tonsils affected would take cold from the application of ice. We should discriminate, and in malignant cases where the tonsils are inflamed should be careful about applying ice. In the use of aconite with children we should be very careful, as in fever it diminishes the circulation, and I would not recommend its general use unless you can see the patient two or three times a day and

watch the effect of the aconite. A simple thing to use is a little potash with tincture of iodine. In scarlatina complicated with diphtheria it is better to use very little medicine. I have nothing against chlorate of potash, however I read a very interesting paper by a professor in New York, his name I do not now remember, who says that observation has shown that chlorate of potash has often produced nephritis, and I think great care should be taken in its use.

DR. R. TILLEY said: One of the points brought forward by the author is the use of kerosene. I remember that Besnier, a professor of skin-diseases in Paris, says that kerosene is used extensively by the laity, but he regards it as a dangerous remedy in the hands of people generally, and a very inefficient one; he was speaking, it is true, of the treatment of itch. I protest against the use of the terms ozone and electrical conditions of the atmosphere: we know practically nothing about either.

DR. J. M. G. CARTER said that he was obliged to leave in order to take the train for Waukegan, and expressed regret that he could not remain and reply to the criticisms upon his paper.

PROFESSOR W. E. QUINE said: An interesting feature of the experience embodied in the paper is the obvious failure of the writer to differentiate infectious from non-infectious tonsillitis. I presume it is a matter of familiar observation to all who have been long engaged in the practice of medicine that many cases of follicular tonsillitis occur which baffle the judgment of the most experienced physician to determine with precision whether they are infectious or non-infectious. I have often seen in my own practice cases of this kind. Often one member of a family, probably the first one attacked, exhibits plainly marked features of simple follicular tonsillitis, and those of the

family who sicken afterwards exhibit the phenomena of diphtheria, or less frequently, scarlatina. The text-books do not give a reliable guide to diagnosis, and if any of my colleagues know of means by which cases of this kind can be differentiated with certainty we would like to know them.

One gentleman has alluded to the opinion of an eminent professor in New York; I remember that Jacobi, who is perhaps the person referred to, in a recent article maintains very vigorously that many cases of so-called tonsillitis are in reality immature cases of diphtheria, and he stoutly maintains that there are many cases of diphtheria never having patches in the throat, and where the patient walks on the street and communicates the disease freely to those with whom he comes in contact.

PROFESSOR SARAH HACKETT STEVENSON said: Last February I was called to see a lady who had frequently suffered from tonsillitis. She was "subject to quinsy." I suggested that her child should not be kept in the same room with her as the case seemed more than ordinarily violent, and gave the usual treatment for quinsy; the disease went on to suppuration. I was called out of the city after one of the tonsils had discharged, and during my absence, about five days, her child was attacked with malignant scarlet fever, and died before my return. This is the first case in which I ever suspected that a benign form of tonsillitis might reproduce a malignant form. Since then I have watched all cases, however simple they may seem.

DR. C. T. FENN said: I think we should all take an interest in this work, especially in the most practical suggestions of Dr. Earle. The fact is, that to regard these cases all as malignant, is to be on the safe side. A case of simple tonsillitis has a tendency to develop into diphtheria. I protest against the folly of attempting to distinguish between mild and simple

cases of tonsilitis and diphtheria. In regard to treatment, I have no use for gargles or washes; I will not force open the mouth of a child and cause it to cry, but steadily and persistently, every fifteen minutes, I will give such medicines as the child will pass over the tonsils when swallowing.

PROFESSOR J. S. KNOX said: I regret that the paper is so general, the author evidently groups together a variety of cases of tonsilitis of different classes. There is undoubtedly an inflammation of the tonsils due to eruptive diseases, such as small-pox and scarlet fever, and there is a tonsilitis which is purely catarrhal, and another which is purely due to diathesis and which is rheumatic or syphilitic. The treatment differs accordingly. I think there is an error as to the value of chlorate of potash; better results will be obtained from the use of bicarbonate of potash, the value of the drug lying in the fact that it is a potash salt, and I think that the bicarbonate of soda would be still much more efficient. Where the hypsulphite of soda would do good, the salicylate would do more.

DR. J. J. M. ANGEAR said: It seems to me that if we remember that there is such a thing as resistance, the absence of which is susceptibility, it will explain some, if not all of these difficulties. We can readily imagine a robust, healthy child with strong resistance to morbid influences, and especially that of diphtheria, on exposure, would have simple tonsilitis (abortive diphtheria); but suppose that his brother, with strong susceptibility, is exposed to the same morbid influences, he will develop a case of undoubted diphtheria.

In diphtheria, we have an inflammation with fibrinous exudation which breaks down the mucous cells and forms the diphtheritic patch; this furnishes a nidus for the micro-organisms, which go on secreting or fermenting their peculiar virus, the absorption of which contaminates the whole body, and now

we have a constitutional disease. Will not this explain a large number, if not all, of those cases where four or five children in a family are taken down apparently with simple tonsilitis, and some one child that has not their resistance is attacked with undoubted diphtheria. In this house we have tonsilitis, and our neighbor severe diphtheria. By remembering these pathological facts, we shall see that it is, or it may be, all the same morbid influence here and yonder,—here, recovery in a few days; there, death in a few hours.

PROFESSOR F. O. STOCKTON said: In acute tonsilitis I think it will be found that ice is the proper treatment in the first stage, before suppuration has begun. It is very seldom that pus is located in the tonsil, it is behind the tonsil. With regard to a differential diagnosis between diphtheria and tonsilitis, there is almost always in diphtheria a regularly graded rise in the temperature; in acute tonsilitis, so-called, or follicular, the temperature is not regular, it rises at a jump, the attack comes on suddenly, begins with a chill immediately followed by fever; in diphtheria there is a gradual rise, going up one day, dropping the next. I think if we took a record of given cases of diphtheria and tonsilitis, we would find that a regular rise in temperature in diphtheria occurs as in the essential fevers.

THE AMERICAN ACADEMY OF MEDICINE.

The ninth annual meeting of the American Academy of Medicine was held in New York, October 28th and 29th.

The following papers were presented October 28th:

“The Study of Medicine as a Means of Education.” By
ROBERT LOWRY SIBBERT, A. M., M. D., of Carlisle, Pa.

"Medical Supervision in Student Life." By CHARLES MCINTIRE, JR., A. M., M. D., of Easton, Pa.

"Western North Carolina as a Health Resort." By HENRY O. MARCY, A. M., M. D., of Boston, Mass.

"The Importance of Climatology Considered as a Regular Branch of Study in Medical Colleges." By E. H. M. SELL, A. M., M. D., of New York.

At eight o'clock, P. M., Address, by ALBERT L. GIBON, A. M., M. D., Medical Director, United States Navy, President of the Academy:—"What is Medicine?"

After which the annual collation was participated in by the members.

During the second day's session the following papers were presented:

"Medical Evidence." By THOMAS J. TURNER, A. M., M. D., PH. D., Medical Director United States Navy.

"Report on Laws Regulating the Practice of Medicine in the United States and Canada. By RICHARD J. DUNGLISON, A. M., M. D., of Philadelphia, Pa., and HENRY O. MARCY, A. M., M. D., of Boston, Mass.

"Health Officers, Ancient and Modern." By BENJAMIN LEE, A. M., M. D., Secretary of the State Board of Health of Pennsylvania.

"Micro-organisms and their Relation to Disease." By SAMUEL N. NELSON, A. B., M. D., of Cambridge, Mass.

"Observations on the Relation of Bacteria to Certain Puerperal Inflammations." By ERNEST W. CUSHING, A. B., M. D., of Boston, Mass.

"Medical Licenses and Medical Honors." By EDWARD JACKSON, A. M., M. D., of Philadelphia, Pa.

"The Physician and his Patient." By JOHN DEVIN KELLY, A. M., M. D., of Utica, N. Y.

BOOKS RECEIVED.

A Text-Book of Medical Physics, by John C. Draper, M.D., LL.D. Philadelphia: Lea Brothers & Co. Chicago: Jansen, McClurg & Co.

Cholera, by Alfred Stillé, M.D., LL.D. Philadelphia: Lea Brothers & Co. Chicago: Jansen, McClurg & Co.

A Text-Book of Physiology, by M. Foster, M.A., M.D., F.R.S. Third American from the fourth revised English edition. Philadelphia: Lea Brothers & Co. Chicago: Jansen, McClurg & Co.

A System of Practical Medicine, by American authors. Edited by William Pepper, M.D., LL.D. Vol. II. General Diseases (continued) and Diseases of the Digestive System. Philadelphia: Lea Brothers & Co. Chicago: Jansen, McClurg & Co.

Elements of Modern Medicine, by R. French Stone, M.D. New York: D. Appleton & Co. Chicago: Jansen McClurg & Co.

The Technology of Bacteria-Investigation, by Charles L. Dolley, M.D. Boston: S. E. Cassino. Chicago: Jansen, McClurg & Co.

Inebriism, a Pathological and Psychological Study, by T. L. Wright, M.D. Columbus, Ohio: W. G. Hubbard. Bellefontaine, Ohio: Dr. T. L. Wright.

Diseases of the Tongue, by Henry F. Butlin, F.R.C.S. Philadelphia: Lea Brothers & Co. Chicago: Jansen, McClurg & Co.

A Treatise on Epidemic Cholera and Allied Diseases, by A. B. Palmer, M.D., LL.D. Ann Arbor, Michigan: Register Publishing House.

Renal and Urinary Affections, by W. Howship Dickinson. New York: William Wood & Co. Chicago: W. T. Keener.

Poisons: Their Effects and Detection, by A. W. Blyth. Vols I and II. New York: William Wood & Co. Chicago: W. T. Keener.

A Practical Treatise on Diseases of the Kidneys and Urinary Derangements, by Charles Henry Ralfe, M.A., M.D. Philadelphia: Blakiston, Son & Co. Chicago: W. T. Keener.

An Introduction to the Study of the Diseases of the Nervous System, by Thomas Granger Stewart, M.D. Philadelphia: J. B. Lippincott & Co. Chicago: W. T. Keener.

Cancer: A Study of Three Hundred and Ninety-Seven Cases of Cancer of the Female Breast, by Willard Parker, M.D. New York: G. P. Putnam's Sons. Chicago: W. T. Keener.

The Treatment of Opium-Addiction, by J. B. Mattison, M.D. New York: G. P. Putnam's Sons. Chicago: W. T. Keener.

Comparative Anatomy and Physiology, by F. Jeffrey Bill, A.M., M.D. Philadelphia: Lea Brothers & Co. Chicago: Jansen, McClurg & Co.

PAMPHLETS RECEIVED.

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- Report of the Proceedings of the Tennessee State Board of Health.
Bacterial Pathology. By Watson Cheyne.
Deviation of the Nasal Septum. By J. W. Gleitsmann, M.D.
Surgical Hemorrhage. By J. W. Gleitsmann, M.D.
Third Annual Report of the Provincial Board of Health of Ontario.
A Case of Poisoning Resulting from Chloroform taken Internally. By
Llewellyn Eliot, M.D.
Shadows in the Ethics of the International Medical Congress. By Levi
Cooper Lane, A.M., M.D.
Voice in Singers. Carl H. Von Klein, A.M., M.D.
Proceedings and Addresses at a Sanitary Convention held at Lansing,
Mich., March 19th and 20th, 1885. ———, Dec. 2 and 3, 1884. ———, Apr.
17 and 18, 1884.
Co-operation of Citizens in Preventing the Spread of Disease. By
Rev. W. A. Masker.
The Public Health Service of Michigan. By Hon. John Avery, M.D.
Transactions of the Louisiana State Medical Society.
An Address on Cholera Infantum. By Wm. Berry Watson, A.M., M.D.
Duty of the State Towards the Medical Profession. By Conrad George,
M.D.

ABSTRACTS AND EXTRACTS.

THE PROGRESS OF PHARMACOLOGY AND THERAPEUTICS.

Such was the subject to which Professor Fraser, the President of the Section of Pharmacology and Therapeutics at the annual meeting of the British Medical Association, addressed himself in opening his Section. Few men could be found better adapted to descant upon the renaissance of pharmacology, or to point out the rational delimitation of that science. The peculiarity of the position of the Section, and its recent growth out of the older Section of Medicine, may seem to some minds to need an apologist, or, it may be, an advocate who would clearly indicate how the new Section not only has long been needed, but presents earnest of a most important and valuable future. Certainly Professor Fraser's words amply prove the positions in question. "Medicine," said the President, "is a progressive subject," and with this progress is involved its inevitable division into departments, among which, that devoted to pharmacology and therapeutics has asserted its claim to individual recognition among the sections. That such a claim has been preferred, and has received a tardy acceptance, seems incident to the very nature of the subjects. This view also is confirmed when we glance at the history of pharmacology. As is pointed out in the address, there are two ways of learning therapeutics; the one by clinical study, the other by pharmacological research. The clinical study involved too many and complex issues ever to lead to definite, at least to scientific results; so that, until

resort was had to direct experiment upon the normal organism, and physicians learned therefrom what where the physiological action of drugs, no sure advance could be obtained in therapeutics. The older "systems of medicine" teem with what we at the present day regard as rank absurdities; the remedies were less studied than were the general systems of treatment, while the systems themselves were based upon pure speculation, without any attempt being made to bring the matter to the test of actual experiment. Bichât and Magendie recognized the necessity for ascertaining the action of remedies by experiments, and thus founded the science of pharmacology. But the practical business of curing disease must be furthered by such research, or the hold of pharmacology upon so pre-eminently practical a profession as that of medicine would be ephemeral, even to the vanishing point. Here Professor Fraser entertains no hesitating position: "precision," he assures is thus attained in administration, errors in selection (of remedies) will be avoided * * * successful applications will be possible where the pathological changes are of a simple kind.

A further development of this important address, is the stress laid upon the importance of recognizing and studying a pathological physiology. Morbid anatomy, so closely and zealously pursued, has replaced, for some, inquiry into the physiology of perverted function, of processes originating out of conditions nonexistent in the normal organ, or accruing upon actual new development of tissue. Save in so far as semeiology busies itself with the actual results of morbid processes, some manuals, and many clinical lectures, take little cognizance of such physiological problems. Pharmacology, which in one way conducts its researches by exciting departures from the physiological standard through the administra-

tion of drugs, naturally attaches especial importance to the study of the phenomena of the living organisms during disease. Through the successful prosecution of such a study, moreover, can therapeutics alone hope to treat disease. Without depreciating the older method, namely, that of administering a remedy, and observing its effect, it must be admitted that researches into pharmacological domains present far greater opportunities of attaining to the exactness and precision to which Professor Fraser alludes. He sees no reason why the physician of the future should not use his agents with the same certainty and delicate accuracy which characterizes the operations of the engineer. We heartily coincide in the wish for so happy a consummation, and believe that the institution of the Section of Pharmacology and Therapeutics, especially when its deliberations are presided over and directed by practical pharmacologists like Professor Fraser, will do much in promoting so desirable an end.

Undoubtedly, the progress of this department of medicine is at present hampered and crippled. It is pointed out, in the address, that the average student receives no instruction in the research-methods of pharmacology, and even, in many instances, has inculcated into his mind a certain depreciation of the scientific side of therapeutics. *Materia medica* and pharmacy usurp the place of pharmacology and therapeutics. Students who know nothing of the physiology of disease are, in their first or second year, doomed to "get up" certain cut and dried facts concerning plants and minerals; and upon these facts, added to an arbitrary posological table, they are examined. If they pass they are presumably cognizant of therapeutics, and, so far, apt at treating disease. When they advance a few steps further, they accumulate "tips" as to treatment, and their course is run. Such a picture will not, of course, be taken as

applying universally; many of the teachers in the schools are as thoroughgoing pharmacologists as is Professor Fraser himself, and their lectures abound with purely experimental results. But, even in their case, almost insuperable difficulties are offered to any practical demonstrations of the facts they teach. Laboratories, in which pharmaceutical research can be undertaken, are in England conspicuous by their absence; so that workers in this field must either curtail their efforts within the narrowest limits, or leave their practices to study at a foreign university. That the subjects of pharmacology and therapeutics should occupy a much later period in the student's curriculum than it does at present, no one conversant with teaching will gainsay, and Professor Fraser suggests the third session. Probably, it will be long before such a change be instituted—the more so, when we remember that the selection of teachers in our London schools is only too often made rather on account of the individual than because he knows anything of his subject. Pharmacology has even now extended its ramifications so widely, that only a special and prolonged study of its facts and its methods can render a man in any way competent to teach it to a class. In despite of this, we find lecturers who have neither shown taste or power for prosecuting research, and who pretend to no erudition save a fair knowledge of the *British Pharmacopœia*.

When Professor Fraser's paper has been widely read and carefully considered, we may hope that this far-sighted view of pharmacology will receive a more universal acceptance than has hitherto fallen to its lot, while the requirements for its progress being recognized will be met. There is no doubt that the influence of such an address cannot but be highly salutary. Although it may be urged that but little is said about the progress of pharmacology and therapeutics, yet what

is emphasized is really far more to the point. To indicate that pharmacology is a science, and capable of enlisting in its service scientific methods, is a great step.

One other point upon which Professor Fraser touched with a light hand is the inclination there is for men unfamiliar with the new Section to betake themselves and their papers, although dealing with pure therapeutics, to the Section of Medicine. Such an obvious mistake should be remedied by the secretaries when they receive the papers, as much valuable time and material is wholly lost through introducing discussions into wrong Sections.*—*British Medical Journal*.

DIGESTIVE FERMENTS.

The following extract is also from the *British Medical Journal*:

“The association was fortunate in securing the services of so eminently practical a pharmacologist as Dr. William Roberts, of Manchester, to deliver the address in therapeutics at Cardiff this year. Dr. Roberts has succeeded in establishing for himself a world-wide reputation, not only as a physiologist, but as a clinical teacher, and his work always commands attention and interest. His Lumleian lectures on the digestive ferments, delivered before the Royal College of Physicians of London in

* Whilst many of the complaints that have of late years been made of the defects of teaching, and the limited requirements of many American colleges for a degree in medicine, have not been without good cause, it seems apparent, from the foregoing extract from *The British Medical Journal*, that such defects are not limited to the American side of the Atlantic ocean, but that other countries, as well as America, find how difficult it is to secure that excellence in teaching, and that high degree of attainment among physicians and medical students, which all commend and which so few seem to reach. Let us hope that the formation of the section, to which the article alludes, has been one step forward, and in the right direction, and that it may be followed by others which shall ultimately mark an advance:—[EDITOR.]

1880, are usually regarded as a type of good scientific work. His address before the association, on the feeding of the sick, although more restricted in its scope, has been even more widely read, and has excited much comment, both in the medical and in the general press. We are glad to find that Dr. Roberts intends publishing, shortly, the results of the experiments on which he has been long engaged respecting the influence of salivary and peptic digestion on the "accessories," alcoholic beverages, tea, coffee, cocoa, etc., which are universally employed in one form or another as food. This is an inquiry of an eminently practical nature, the importance of which it would be difficult to overestimate. It is clearly a subject closely affecting the welfare of our patients, and one which must of necessity daily occupy the attention of every physician. Observations of this class, fortunately, do not necessitate the employment of expensive apparatus, and can be carried out almost as well in the consulting room as in the physiological laboratory. We believe that every medical man would do well to make a point of testing for himself the activity of the digestive ferments which he is in the habit of prescribing. It is a subject which will probably occupy the attention of the Collective Investigation Committee at no distant date. Dr. Roberts speaks of having recently had placed at his disposal a preparation, free from taste and smell, consisting of the pancreatic enzymes in a highly purified state. It is not hygroscopic, and may be kept unchanged for an indefinite period, freely exposed to the air. A substance of this nature, in the form of a white powder, was prepared some years ago by Fairchild, the American chemist, and has already been extensively used in this country. The pancreatic juice as is now well known, consists of four ferments: trypsin, which changes proteids into peptones in alkaline and neutral media; a curd-

ling ferment which curdles the casein of milk ; the pancreatic diastase, which acts like extract of malt, changing starch into sugar and dextrine ; and an emulsive ferment which emulsifies and partially saponifies fats. There can be no doubt that, as a digestive agent, extract of pancreas is vastly superior to any preparation made from gastric juice. "The pancreas," says Dr. Roberts, "excels the stomach as a digestive organ, in that it has power to digest the two great alimentary principles, starch and proteids, and an extract of the gland is possessed of similar endowments." There can be no doubt that a series of carefully reported cases of different diseases treated by the pancreatic method of predigestion is a desideratum. It has proved useful in many hands in uræmic vomiting, gastric catarrh, pernicious anæmia, gastric ulcer, and pyloric and intestinal obstruction. Its introduction has probably done more than any other therapeutic measure of recent times to lessen infant mortality.

VERDICT OF COURT-MARTIAL.

The verdict of the court-martial in the case of ex-Surgeon General Wales has, says a Washington correspondent of the *Philadelphia Medical Times*, caused somewhat of a sensation. It will be remembered that Dr. Wales was tried by court-martial and found guilty of inefficiency and neglect of duty, because he failed to discover the rascality of several of his clerks, by which the Government was swindled out of a large amount of money, said to be over a hundred thousand dollars. The court failed to connect Dr. Wales with any of the frauds, but convicted him on a technicality, and imposed what is considered here a very severe penalty, out of all proportion to the offence. The high professional character of the late Surgeon General, and his successful labors for the advancement of the

medical staff of the navy, did not avail him; in fact, they seemed to render his offence the greater in the eyes of the court, which apparently held the opinion that the duties of the Surgeon General were simply to watch his subordinates and prevent their stealing. It seems by the confession of the principal criminal, the late chief clerk of the Bureau of Medicine and Surgery, that the frauds had gone on undetected for years under Dr. Wales's predecessors; but the court refused to go into the inquiry farther than concerned the latter's administration. To outsiders it looks very much as if Dr. Wales was the victim of a systematic persecution, of which the late Secretary of the Navy was the chief promoter. It is well known here that there was a violent personal antipathy between the two men, which may have been partly political, but it is believed to have largely arisen from social antagonisms. The penalty imposed by the court is suspension from rank and duty for a period of five years. It is said that Dr. Wales's counsel will not rest satisfied with this verdict, but will appeal the case to the Supreme Court.—*New York Medical Record*.

THE TOXICITY OF NORMAL URINE.

The toxicity of normal urine has been a disputed question for a long period of time. The weight of evidence is on the affirmative side, although the immediate poisonous principles are not known. Urea, uric acid, kreatin, and the potassium salts have in turn been incriminated. Recent investigations, however, point to the existence of poisonous alkaloids in normal urine. M. CHAUTESSE has summarized the history of the subject, which is well abstracted in two leading articles, appearing in the *British Medical Journal*, June 6th and July 4th, 1885.

Alkaloids have been found in putrid albumens, bile and normal muscle-juice by GAUTIER and POUCHET. BROUARDEL and BOTUMY published, in 1881, a distinguishing reaction between the vegetable alkaloids and the ptomaines. The alkaloids of putrefaction, in the presence of potassium ferricyanide and ferric chloride yield the Prussian blue coloration. In 1880, POUCHET found an alkaloid substance in normal urine, which, in combination with hydrochloric acid, formed double salts with platinum, gold and mercury. BROUARDEL'S discovery that "alkaloids exist in the bodies of living beings, which have been generated in the alimentary canal, and probably elaborated by the vegetable organisms there present acting as the agents in intestinal putrefactions," marks an important advance beyond the results of the labors of SELMI, GAUTIER, POUCHET and BOUTMY. Part of these intestinal alkaloids are absorbed into the blood, further elaborated by the kidneys, and appear in the urine.

Professor BOUCHARD, at a recent meeting of the Société de Biologie, read an interesting and valuable paper on the toxic qualities of normal urine. In the light of the recent progress of physiological chemistry, briefly detailed in this paper, the results of Professor BOUCHARD'S experiments are clearly intelligible. The fact of toxicity of the urine was established by the injection of specimens of urine into the veins of frogs and rabbits.

Following the injection of normal urine into the veins of a rabbit, BOUCHARD observed "contraction of pupils, slow respiration, muscular weakness, lowered temperature, abolition of reflexes, torpor," and death as the result of arrest of respiration. It is a well-known fact that 90 cubic centimètres of water for every kilogramme of its body-weight may be injected into the veins of an animal without the production of mechanical ef-

fects. In BOUCHARD's experiments, the quantity of fluid used was not the tenth of this amount, so that the effects were of a true toxic character.

BOUCHARD next attempted to determine the particular constituent to which the poisonous character was due. Without entering into the details of the experiment, it was found that urea, uric acid, kreatin, and the potassium salts, alone and combined, "though undoubtedly poisonous, were not so in the small quantities contained in the urine injected. He concludes that there are numerous poisonous principles present, which do not reside in one, but in several of the urinary constituents." The poisonous principles are not volatile.

Very recently, LEPINE and GUERIN have demonstrated that these alkaloid bodies are increased in various acute diseases. Thus in typhoid fever and pneumonia, the toxicity of the urine was greatly increased, while in the urine of diabetes, catarrhal jaundice, and cirrhosis with jaundice no increase of toxicity was observed.—*Journal of the American Medical Association*.

THE TREATMENT OF BROMIDROSIS OF THE FEET.

DR. J. S. STEWART thus writes in the *Edinburgh Medical Journal*, March, 1885 :

Few affections of the skin are more disgusting or more difficult to treat successfully, by the ordinary methods, than fœtid sweating of the feet, with or without excessive secretion. The thickened skin over the heel and anterior ends of the metatarsal bones, seems to afford a very secure and ineradicable nidus for the as yet undifferentiated enzyme which induces fermentation with its fœtid products there. One form of treatment seems to be invariably successful, and therefore deserves to be much better known, viz., that devised by Hebra, which, he says,

never fails, and recommends to be used in all severe cases. Hebra employed the following ointment.

℞. Olei lini,
Emplastri plumbi liquefacti, *equales partes*.
M. ft. ung.

This he directed to be spread thickly over a piece of linen large enough to cover the sole and sides of each foot, — both feet, in the first place, to be carefully washed and dried. Pieces of linen rag well covered with the ointment he directed to be placed between the toes, so as effectually to separate them and secure thorough application of the ointment. Over this the sock or stocking could be worn with a light slipper, and patient allowed to pursue his or her ordinary calling. This dressing to be repeated every twelve hours for ten or twelve days. The foot not to be wetted after treatment has begun, but wiped, when necessary, with a dry cloth, or washed with dry bran or other mealy substance, should any part become dirty or caked with old ointment, etc.

Whether mild or severe, all cases are curable by it, and no other method seems to yield such a prompt and satisfactory result. To insure success, the whole of the skin of soles and sides of feet and toes must be tanned by the process and gradually thrown off as brown leathery exfoliations in from two to four weeks. All boots, shoes, slippers, etc., worn by patient should be discarded; because if worn again the patient is reinfected in three or four months, and gradually becomes as bad as at first. Stockings or socks should be carefully cleansed, and disinfected by heat or by steeping in a hot solution of perchloride of mercury (1 in 1,000 of water) for several hours before being washed. Neumann directs that Hebra's ointment and dressing should be changed once in three days for nine

days, that is, three times altogether, a method not to be relied on in many cases seen in this country.

What I have found to yield the most satisfactory result, in treating a tolerably long series of cases, is to have the feet thoroughly washed in hot water, then steeped for a few minutes in a solution of permanganate of potash of the strength of from four to six grains in the ounce of water. The feet are then dried, not to be again wetted until complete exfoliation of the tanned cuticle has taken place.

Hebra's lead plaster ointment is then thickly spread on strips of cloth about one and one-half inch broad, and the foot covered from the toes back over heel as high as the malleoli with these, arranged and applied like a scultetus bandage. Each toe should first be wrapped round with a strip of clean rag half an inch broad, and thickly spread with the ointment. This dressing should be renewed every twelve hours with fresh rag and ointment, for a period varying from ten to sixteen days, according to the severity of the case and the thickness of the heel skin. In most cases the odor will be very much diminished by the end of the third day, and will not be perceptible by the ninth. The shedding of the skin takes place *pari passu* with the growth of the new cuticle, and may not be completed until the end of the third or even of the fourth week.—*Quarterly Compendium of Medical Science.*

NEWS ITEMS.

The second meeting of the Committee of the American Medical Association, on organization of the Ninth International Medical Congress, will occur in New York on September 3d. The Congress will occur in Washington, D. C., in 1887.

Dr. John Ten Broek, of Paris, Ill., died on August 8, 1885, aged 77 years. He was one of the oldest practitioners of medicine in the State.

The American Dermatological Association held its Ninth Annual Meeting at Greenwich, Conn., on August 26th, 27th and 28th.

Professor Henry B. Sands has resigned his chair of Practice of Surgery in the College of Physicians and Surgeons of New York.

Menthol in twenty per centum solution is recommended as a local anæsthetic for mucous surfaces. It is said to be a good substitute for the hydrochlorate of cocaine, and is less expensive.

The Detroit Medical College and the Michigan College of Medicine, of Detroit, have been consolidated under the name of Detroit College of Medicine.

St. Paul and Minneapolis, Minnesota, each, has a medical college now.

A ROYAL PHYSICIAN.—Prince Ludwig Ferdinand of Bavaria, who is said to be a son-in-law of ex-Queen Isabella of Spain, and received the degree of Doctor of Medicine at Munich recently, is now engaged in the practice of medicine at Nymphenburg in Bavaria.

Dr. Oliver Wendell Holmes has just passed his seventy-sixth birthday.

The new building for the College of Physicians and Surgeons, of New York, will be located opposite the Roosevelt Hospital.

THE THIRD ANNUAL MEETING OF THE AMERICAN RHINOLOGICAL ASSOCIATION will be held at Lexington, Ky., October 6th, 1885. Papers and Discussions will be devoted exclusively to the Diseases of the Nasal Passages and their sequences.

LOCAL NEWS.

The Chicago Medical Society now holds its semi-monthly meetings in the Probate Court room, on Clark street, instead of in the Grand Pacific Hotel, where its meetings were held for several years.

The regular medical colleges of Chicago begin their winter course of lectures on the 22d day of September, this year.

THE CHICAGO MEDICAL JOURNAL AND EXAMINER.

VOL. LI.

OCTOBER, 1885.

No. 4.

ORIGINAL COMMUNICATIONS.

CONGENITAL COMPLETE PARALYSIS OF THE OCULO-MOTOR OF BOTH SIDES, THE MOVEMENTS OF THE IRIDES AND THE ACCOMMODATION BEING INTACT. *By* DR. R. TILLEY.

[Read, and the patient exhibited, before the Chicago Medical Society, Sept. 7th, 1885]

Complete paralysis of all the branches of the motor oculi of both sides, influencing the external movements of the eye in a boy of twelve years of age, is certainly not a common affection. Still less common, judging from the literature, is the above condition associated with the normal activity of the irides, and the function of accommodation intact. I refer to the present age of the boy, lest any should contend that I have not sufficient grounds for claiming for the case which I present to you a congenital origin. The mother informs me that a few days after his birth it was observed that the upper eyelids were never raised. In other words, that ptosis existed on both sides. She did not seem to be conscious, even about three months ago, of the peculiar condition of the muscles of the eye-balls. Whilst then the assertion of the mother, as to the existence of ptosis at this early age, is the most direct

evidence I have to present, as to a part, at least, of the difficulty being of congenital origin, it is reasonable, however, to suppose that with a paralysis of the levators at this early age, the paralysis of the other branches of the same nerve existed at the same time. Moreover, if any marked change had occurred in the boy's eyes at any time after he began to notice much, the mother would have found it out. That the paralysis cannot be of recent origin, is evident from the failure of the common test. If I ask him to touch rapidly the tip of my finger, using either eye, he never fails to strike it exactly. I submit, then, for criticism the question of this being legitimately called a case of congenital origin, with such evidence as I have presented.

The question, of course, is here not one of paralysis or paresis of individual branches of one or both of the oculomotors, but of complete paralysis of all the branches, excepting only the irides and the ciliary muscles. In looking up the literature, so far I have found little satisfaction; so that I am not in a position to form any estimate as to the frequency with which such a difficulty is observed. One tabulated form of the cases of paralysis of the muscles of the eye, as they were observed in Dr. Hermann Cohn's clinic, and published by Dr. Paul Schubert (p. 96), I find, out of one hundred and ninety-nine cases of paralysis, thirteen are said to have affected all the branches of the oculo-motor, leaving us to suppose that the iritic nerves, and those supplying the ciliary muscles, were also affected. We are, however, not informed whether both oculomotors were affected or not. Out of these thirteen, in assigning the various causes, one only is said to be congenital and two unknown.

Alfred Von Graefe, in "Graefe und Sæmisch," when discussing the question of the paralysis of the oculo-motor, and

speaking of the immunity of the irides and the ciliary muscle, says: "It is remarkable that sometimes when the oculo-motor is in other respects completely paralyzed, the characteristic mydriasis and paralysis of accommodation is not present." "Possibly," he adds, "in such cases there existed an anatomical peculiarity," stating, as the basis of his supposition, that Adamük* found, in three out of forty-two cases, the nerve fibres associated with the contraction of the pupil arising from the abducens instead of the oculo-motor.

With these introductory remarks, I present to you the patient, a boy of twelve years of age. His father and mother are both living. He had one brother, who died young. Separation of the parents will account for the fact that no other children followed this one. Under the circumstances, I cannot get any direct paternal history which would be of interest. Both of the children came quickly after marriage. There was nothing peculiar that I can elicit from the mother, in the way of sickness during the patient's childhood, only he was slow in walking. He is certainly not wanting in intelligence. He constitutes one member of a firm for the delivery of newspapers. In his school he has not done badly, especially when we take into consideration his disadvantage.

His appearance, attitude and gait present a perfect picture of the peculiarities of this affection. You will observe how both lids drop over the eyes, and that any effort to open or close them is effected by the frontalis and the corrugators. I will call attention, however, to a distinct crease which exists now in the external part of the lid, corresponding practically to the upper border of the tarsus. That crease, or fold, did not exist a month ago. I shall refer to that later. You will notice, also, that although he can stand with his head erect, in

*P. 56.

doing so he is not assuming the most advantageous position for the use of his eyes, on account of their being turned downwards by the action of the superior oblique muscles. To overcome this, he directs the head somewhat backwards. He can use either eye at will, although he prefers the left, a circumstance which is peculiar, as the visual acuity of the right is considerably greater. As I lift the eyelids, you will see that neither of them, with the head straight, serves to show him the way just in front of him; consequently, in walking, if he is using the right eye, he turns his head to the left, so as to bring the field of vision as nearly as possible in front of him; and if he is using his left eye, he turns his head to the right. At the same time, he combines with the sidewise direction a backward direction, to overcome the disadvantage of the eyes being turned downwards. All the movements of which his eyes are capable are confined to such as are possible from the antagonism of the external recti and the superior oblique muscles. Movements upwards, inwards and directly downwards are impossible. In inspecting the eyes you will see, also, that the left deviates more to the left than the right does to the right; consequently, when he walks, using his right eye, he turns his head less to the left than he turns his head to the right when he uses his left eye.

The distance to which the eyes deviate is so great that in no part of the visual field does he get double vision; even if such were possible, the difference in the visual acuity of the two eyes might prevent the recognition of double images. The deviation you will be able to estimate roughly by the position in which he holds his books when reading with the separate eyes. You will be able to observe for yourselves, as he comes around, that the irides are active, both for accommodation and from the mere influence of light.

His vision is far from normal. Distant vision for left, $\frac{6}{100}$; for right, $\frac{6}{36}$; and neither eye gets any advantage from glasses. For near vision he can read S. o.8 at 6" with either eye. The right does not serve him so well as the left. The left, however, is more divergent. The exact amount of accommodation which he possesses I have not estimated.

The ophthalmoscopic examination, about two months ago, revealed nothing abnormal beyond a well defined small black spot on the inner and upper quadrant of the posterior surface of the left lens. I did not attempt to estimate the refraction by the ophthalmoscope.

The color sense is normal; the olfactory organ is perfect; taste and hearing excellent. I mention these particulars merely to show that their investigation has not been neglected.

As to the etiology of this particular case, I am strongly suspicious of the presence of specific trouble on the paternal side. The several points which are not conclusive, but of considerable importance, I prefer not to discuss at present. The circumstances are not propitious for investigation. I wish, however, to advance the historical testimony against my theory: Von Graefe, in Vol. vi, p. 72, "Graefe und Sæmisch," leads one to infer that he has not observed paralysis as a result of congenital specific trouble, or, at any rate, that it is very rare, and states that he does not find it referred to in a book on the special subject of inherited syphilis in its influence on the eye and ear, by Johnathan Hutchinson. As I may be able later to obtain more direct information bearing on the present case, I will leave the question without further discussion now.

As to the seat of the lesion, the matter is, of course, one of speculation. But the speculation is highly interesting. Its extent and uniformity alone, I think, excludes any conception

of its being peripheral in origin. It would be folly to entertain the idea of any obstruction in the orbits. The meninges are the favorite seats of primary specific deposits, but were the meninges the chief source of trouble here, we should probably have had other associated difficulties, either of hearing, smell, or paralysis of other nerves. If, then, we exclude the peripheral origin, and exclude any obstruction in the orbit, if we do not find sufficient evidence of meningeal trouble we must seek for the lesion in the cerebral substance somewhere, either at the origin or course of the nerves before leaving the brain substance. Further speculation as to the location in the cerebral substance I leave to others. I will here call attention to one important circumstance which somewhat favors the view that the lesion is in the nerve substance. There is complete absence of the patellar reflex. Now, however guarded we may be in our views of the relation of the patellar reflex to nerve-tissue change, we must admit that they are frequently associated. We also know that paralysis of the ocular muscles are commonly associated with the development of loco-motor atéxia, of which the absence of the patellar reflex is one of the suspicious symptoms. He has none of the other symptoms, however, of loco-motor ataxia which I can elicit. Whatever theory we adopt as to the pathological condition, it is difficult to realize how the fibres supplying the iris and the ciliary muscle should have so uniformly escaped. It seems necessary to suppose the existence of some anatomical peculiarity, or the development of a vicarious action in the branch coming from the ophthalmic division of the fifth. It will be remembered that the short root from the motor-oculi unites with the long root of the ophthalmic division of the fifth to form the lenticular ganglion. I submit that it is not impossible that this otherwise sensory nerve may, under the circumstances,

associated with a congenital defect, take upon itself functions such as would, under normal circumstances, be performed by the ordinary motor nerve. Or it may be, as Von Graefe suggests, that the abducens has in this case supplied the motor fibres.

My treatment you will in part have anticipated from the view I have taken of its etiology. I will, however, add that in addition to specific treatment I have been using electricity, not with any great expectation. The difficulty of applying it in the given case to the affected nerves is considerable. Nevertheless, I am applying it. Further, to leave no available effort untried, on finding there was marked phimosis, with considerable elongation of the prepuce, I circumcised him about three weeks ago, in order that if there was any influence associated with reflex action from that source I might remove it. A little circumstance, small as it is, I can not fail to mention, which has occurred since the circumcision. Six days after the operation, when the boy came down to my office, I was observing the crease I referred to above, in the upper eyelid, corresponding to the upper border of the tarsal cartilage, and searching mentally for a means of ascertaining, without putting a leading question, as to whether the mother had noticed this peculiarity, when she told me, as though anticipating my thought, that the crease or fold in the upper eyelid had developed since the operation.

The prognosis as to relief of the difficulty does not seem promising; but I must say that within the past week my expectation has greatly increased. The movements of the eyes are certainly greater.

125 State street.

FIVE CASES OF OVARIOTOMY. *By C. G. DAVIS, M. D.*

Few questions in surgery have so thoroughly occupied the attention of the profession, both at home and abroad, during the last twenty-five years, as those that arise in connection with the operation of ovariectomy. Some of these have been apparently decided, while many others still remain under discussion.

The rapid progress that has been made in the operation becomes marked when we note the successful results now constantly recorded, and then remember that no longer ago than 1861, the operation was spoken of as one "that would subject its performer to a criminal indictment for manslaughter." With our present successful methods, resulting in a constantly diminishing death-rate, we should not forget to give due praise and honor to those who have acted as pioneers in this work, and still to others who have led the advance in testing in the crucible of experience the various methods and plans of operating suggested. Looking back over their work we have been enabled to avoid their errors and to adopt that portion which seemed most successful.

The medical profession and the world in general will always owe a debt of gratitude to McDowell, Clay, Baker-Brown, Keith, Wells, Tait, Peaslee, Emmet and Atlee for the light they have shed on an operation which is without parallel in the advantages that have resulted to humanity.

In reciting the history of the following five cases, my entire experience in ovariectomy, it is not my object to boast of triumphs, but simply to perform what I consider a duty, in adding my experience to the great fund which has already been contributed to the subject.

CASE I.—Mrs. T. W., Chicago, aged fifty years, consulted me at my office November 10, 1883. Her general health in

previous years had been good, with the exception of headaches, from which she had only occasionally suffered. She began to menstruate in her sixteenth year, and this function had continued natural in every respect until she was forty-eight. At the time of the menopause she had noticed no unusual disturbance of her health. She was married at the age of twenty, and had given birth to eight children, the youngest being thirteen years old. About fifteen years ago she had twice suffered from miscarriages. Eighteen months previous to the time of her consulting me she began to notice a slight swelling, attended with some pain, in the region of the left ovary. She had been under the care of several physicians, and they had treated her for "dropsy."

On making a general examination I found her physical condition unusually good. Pulse, temperature, respiration and excretions were normal. Her face had the peculiar shrunken and discolored appearance indicative of ovarian disease. The abdomen was uniformly distended and appeared somewhat more enlarged than at the full time of pregnancy. Dullness, and fluctuation over the entire surface. No bulging in the *cul-de-sac* of Douglas. Uterine sound showed the uterus to be normal as to size and position. Diagnosis, ovarian cyst.

Patient being averse to an operation for removal, I suggested tapping as a means of relief. I operated November 25th, on which occasion I was assisted by Dr. Plumb. I removed twenty pints of dark-colored fluid, resembling very much the appearance of strong coffee. The specific gravity was not taken. Chemical and microscopical examination revealed albumen, the ovarian cell, epithelium, etc. She was kept in bed a few days, was greatly relieved, and appeared to gain very much in flesh and strength. In a week the abdomen was noticed to be rapidly increasing in size. She called

upon me to be relieved. I reluctantly consented, and on the 15th of January I again used the trocar and canula and withdrew about the same amount of fluid. The color was much brighter than before, being a light straw color. She did not derive as much benefit from this tapping as previously; in fact, her flesh and strength appeared to rapidly diminish.

In March she again called upon me at my office, seeking relief. I strongly urged the removal of the cyst. Requested her to call upon Dr. Dudley. He gave her a thorough examination, concurred in my diagnosis, and advised an immediate operation. She returned to me and consented. I selected her own home as the place for the operation. Full antiseptic measures were used in every respect. The room, furniture, clothes of the patient and bedding were all thoroughly carbolized with a three per cent. solution. She was sponged the night previous and the morning of the operation with a one per cent. solution. She was allowed a good, generous diet. The night before, a small dose of castor oil was administered, and a light breakfast of broth and tea was given at 8 A. M.

The operation was done on May 18th, with the assistance of Drs. Henry Plumb and M. S. Leech. Dr. Addison H. Foster administered the anæsthetic (ether).

An incision was made in the *linea alba*, beginning two inches below the umbilicus and extending downward three inches. The walls of the abdomen were thick and vascular, and considerable compression had to be used to stay the flow of blood. On entering the peritoneum about two ounces of ascitic fluid escaped. Extensive parietal adhesions were found which were broken down almost entirely with a No. 10 bougie. The cyst was punctured with a Spencer Wells trocar with rubber tube attached, and several pints of fluid drawn off. Several other smaller cysts appearing, into which it was diffi-

cult to introduce the trocar, the incision was enlarged, and with my hand I broke down the different septa and soon delivered the entire cyst through the opening. A number of omental adhesions were found which were easily separated; also about twelve inches of small intestines were found closely adherent to the under surface of the cyst, which were separated only by long and careful manipulation. The pedicle was about four inches broad, extending the whole length of the broad ligament and being attached to the left cornu of the uterus. It was decided to tie it in two sections. Accordingly a needle, threaded with a double white silk cord, was passed through the center and each section tied, and the tumor excised. While holding the pedicle and applying the cautery, the ligature slipped from the larger section and immediately the abdomen began filling with blood. Grasping a pair of large forceps, I elevated the stump, procured another double thread and again tied both sections, the portion of the stump springing from the uterus being so short as to necessitate tying the ligature into the substance of the uterus itself. The cavity was thoroughly sponged, but fearing hæmorrhage from the stump, I placed a Thomas drainage tube in the lower angle of the wound extending to the *cul-de-sac* of Douglas. I closed the opening with six silk sutures. Carbolic oil, absorbent cotton and the flannel bandage completed the dressing. Duration of operation, one hour and a half. Five minims of Magendie's solution of morphine were administered hypodermically. I visited her at 6 P. M. and found good reaction, pulse 100, temperature normal.

She continued to progress favorably, with a temperature ranging from 100°F. to 100.5°F., and a pulse of 110, till the fifth day, when the temperature suddenly rose to 104°F. and the pulse to 140. She complained of severe pain in the region of the

bladder, and a desire to pass her urine every half hour. I found her suffering from a severe cystitis, caused undoubtedly from too frequent introduction of the catheter. I washed out the bladder with a solution of boracic acid, ten grains to an ounce of lukewarm water, and ordered it repeated three times a day. In a few hours the temperature and pulse came to the usual average, and she progressed steadily to recovery. On the seventh day, there being no discharge through the drainage tube, I removed it. The stitches were removed gradually from the eighth to the tenth day. There was but slight suppuration at the stitch holes. She was up at the end of the third week, and is now in good health. Weight of cyst, together with contents, forty pounds.

CASE II.—Mrs. A. L. A., from Shelby, Neb., consulted me October 6th, 1884. She was twenty-eight years old and had a healthy family history. She began to menstruate at the age of fourteen, and had always been regular. She was married in her twentieth year and had given birth to two children, the youngest being five years old. Her previous general health had always been good till the last five years, during which period she had complained more or less of pain in the region of the right ovary, with occasional attacks of bloating in the abdomen. Her symptoms had never been severe, and she only consulted me at the earnest solicitation of friends. For two years there had been a gradual general enlargement of the abdomen, and at the time of the examination she presented appearance of being six months pregnant. The enlargement was symmetrical and fluctuation could be easily obtained. The uterus was normal as to size and position. No fluctuation could be found in the *cul-de-sac* of Douglas. No protrusion of the umbilicus. Diagnosis, ovarian cyst springing from the right ovary. In order to arrive at a more correct diagnosis I

introduced a large needle of a hypodermic syringe into the most prominent part of the abdomen, and withdrew about three drachms of fluid, which, on examination, presented the general appearance of the fluid of an ovarian cyst. I communicated the diagnosis to her sister who accompanied her. It was deemed best not to allow the patient to know of her condition then, as it was impossible for her to remain in the city and be operated on at that time. She returned home and continued to gradually enlarge. In November her physician wrote me that she was suffering from an attack of peritonitis. This continued for some three weeks, was very severe, and had it not been for the skill of her attending physician, Dr. J. A. Inks, she would undoubtedly have lost her life. I was earnestly solicited by her friends to come and perform the operation. I accordingly appointed December 19th. I found her still confined to her bed, not having entirely recovered her strength since the attack of peritonitis. She was much emaciated, the abdomen excessively distended, white and glistening; fluctuation could be obtained over the entire surface. Her home was situated in the suburbs of a prairie village—a veritable “cottage by the wayside,” overlooking a stretch of prairie twenty miles in extent. All of the hygienic surroundings were of the most promising nature, but notwithstanding this I adhered strictly to all of the antiseptic measures, using the carbolic spray and seeing that all the attendants, instruments, etc., were thoroughly carbolized.

The patient was allowed her usual diet up to the day of the operation, when she breakfasted on milk porridge and a cup of tea at 7 A. M. Bowels had been moved the previous day with castor oil. Operation was begun at 10 A. M. Patient was etherized by Dr. F. Englehard. I was assisted by Drs. G. H. Peebles, T. W. Hayden, East, and J. A. Inks.

An incision was made in the *linea alba* three inches in length. There were no parietal adhesions. The cyst was tapped and the fluid evacuated without a drop escaping into the abdominal cavity. On withdrawing the cyst a slight omental adhesion was discovered. The pedicle was long and about an inch and a half broad. It was transfixed and tied with a No. 17 iron-dyed Chinese silk cord, the tumor excised and the pedicle seared with a common cautery iron heated in the fire. The abdomen was thoroughly sponged and the opening closed with four silk sutures. Carbolized dressing was applied, the patient put to bed, and five minims of Magendie's solution of morphine given hypodermically.

In thirty minutes I was compelled to leave her and take my departure for home. Before I left she had reacted and expressed herself as feeling quite well. Dr. Inks wrote me subsequently and sent me the following record of her pulse and temperature :

Dec. 20th, 1 P. M.—Temp., 97.5°F. Pulse, 120.

“ “ 7 “ “ 99. “ 112.

“ 21st, 7 A. M. “ 98.5. “ 130.

After this date the temperature was normal and pulse less rapid. The wound healed without suppuration and the sutures were removed on the eighth day. Her recovery was rapid and her health since the operation is reported much better than for many years. Weight of tumor estimated at twenty-five pounds.

CASE III.—Mrs. C. S., Chicago, aged thirty-seven, consulted me April 10th, 1885. Her general health had not been good since the birth of her only child, thirteen years ago. Had suffered much from headache, constipation and general debility. Menstruation began at the age of sixteen years, was quite regular, but always more or less painful. She was mar-

ried in her twenty-second year. Three years ago she was troubled with difficult micturition, and the obstruction became so great as to necessitate having the urine drawn with a catheter. At that time she consulted Dr. Byford, who told her she had a tumor, gave her medical treatment, but advised against an operation. At the time of her consulting me I found her much emaciated, countenance discolored and her strength very feeble. Abdomen was large, evenly distended, very tense, elastic and showed dullness and fluctuation over the entire surface. The growth had begun three and a half years ago, when she noticed an enlargement in the region of the left ovary. Recently she had increased in size very rapidly, and earnestly requested that I operate and relieve her. The uterus seemed to be slightly enlarged and anteverted, but the sound failed to enter more than two inches. From the history of the case and the present symptoms, I had no hesitation in diagnosing ovarian cyst.

Selecting an upper room in her own home, I advised her to have the operation there, thinking it would be safer, from a hygienic point of view, than the wards of a public hospital. The operation was done April 7th, 1885. I was ably assisted by Dr. Henry Plumb; present, Mr. C. B. Reed, medical student. Dr. King administered the ether. Antiseptic measures were used throughout the operation.

An incision was made in the *linea alba*, beginning two inches below the umbilicus and extending downward three inches. A few slight adhesions were encountered, which were readily overcome, the cyst punctured, and several pints of straw-colored fluid withdrawn. The uterus was discovered to be much hypertrophied, extending upward into the abdominal cavity some four inches and a half, and being over three inches in breadth. Being pressed between the abdominal wall

and the cyst had caused it to become excessively flattened. Had I succeeded in introducing the sound to the full extent of the uterus, I should certainly have hesitated to operate. The narrowness of the cervix, together with the extensive anteversion, had prevented this. It was this pressure on the bladder, undoubtedly, that had so often caused retention of the urine. The pedicle was two inches broad. I secured it with Chinese silk cord No. 17, using the "Staffordshire" knot of Lawson Tait. The cyst was excised and the stump seared thoroughly with Paquelin's thermo-cautery.

The loss of blood being slight, but little difficulty was experienced in "making the toilet of the peritoneum." The incision was closed by four silk sutures, and the wound dressed with carbolized oil, cotton batting, and the flannel bandage applied. Reaction came on well in an hour and a half. Five minims of Magendie's solution of morphine were given hypodermically. Patient continued to do well; temperature not running over 101°F. and pulse ranging from 100 to 110 till the fourth day, when dysenteric discharges began, accompanied with rapid distension of the abdomen with gas. The distension was noticed in the morning, and by evening it had become so great as to open slightly the lower angle of the wound, and threatened to re-open the entire wound. The temperature ran to 102.5°F, and the pulse to 130, yet there were no symptoms of peritonitis. Remembering that this sudden accumulation of gas in the intestine was considered a dangerous symptom by Lawson Tait, I of course regarded it seriously. Recognizing that it must come from decomposition going on in the intestinal canal, I gave:

R.	Sodii Sulphitis	℥ i.
	Tinct. Card. Comp.....q. s. ad. f. ℥ iij.	
M. S.	Teaspoonful every three hours in water.	

On the fifth day the symptoms had almost entirely subsided, and pulse and temperature were again reduced. She improved gradually but slowly, the temperature vibrating from 100° to 101.5°F. and the pulse from 90 to 105 till the end of the fourth week, when both became normal. The cyst was multilocular, and with the contents weighed twenty-three pounds.

She has recently called upon me and expressed herself as enjoying better health than ever.

CASE IV.—Mrs. R. R. B., of Waterman, Ill., aged twenty-six; first became my patient September 15th, 1882. Menstruation had occurred at the age of fourteen, had always been painful, and it was for this ailment that she consulted me. She had been married three years and had never been pregnant. She was extremely nervous, and this symptom was constantly exaggerated from the shock she received from pain experienced at each menstrual period. On making an examination I found tenderness of the right ovary and slight symptoms of enlargement. I gave her a variety of treatment, which seemed for the time being only to be palliative. The dysmenorrhœa would apparently subside for a month or so and then return in its severity. She continued in this variable condition for a year or so. In November, 1884, she returned to me. I found the abdomen enlarged to the size of the third month of pregnancy. Examination showed the uterus to be normal. Abdomen much enlarged on right side. Deep pressure could detect an enlargement the size of a large goose egg in the region of the right ovary, in which I could readily distinguish fluctuation by pressing simultaneously in the vagina and on the outer surface of the abdomen. My diagnosis was an ovarian cyst, with the advice that she have an immediate operation. She and her friends shrank from this ordeal. She consulted a "Magnetic Physician," who said "he

could cure her, having rubbed away several of the same kind." In the latter part of May, of the present year, she again called upon me. I found the abdomen much enlarged and general fluctuation. She now consented to the operation, and I appointed June 7th, at 12 A. M., as the time, and selected for her large, well-ventilated rooms in a private residence in the city. I was ably assisted by Dr. Plumb—present, also, Dr. Annette S. Dobbin and Mr. Reed, medical student. Dr. King administered the ether.

The incision was made in the usual region and three inches in length. There were no adhesions. The walls of the abdomen were very thick and vascular, but the hæmorrhage was easily controlled with pressure forceps. On tapping the cyst I withdrew several pints of liquid, and on removing the trocar a quantity of dermoid material made its appearance. It was evidently a dermoid cyst, containing quite a quantity of fatty material and hair. The pedicle was an inch and a half in breadth. I used the "Staffordshire" knot, with Chinese silk No. 17, and excised the cyst, searing the stump with Paquelin's thermo-cautery. I do not think that more than a tablespoonful of blood was lost in the entire operation. The abdomen was closed with four silk sutures, and the usual dressing applied. Pulse 120, and temperature 99°F.

6 P. M.—Pulse 140°F., temperature 100°F., weight of cyst 18 pounds. For the first week temperature ranged from 99°F. to 101°F., and pulse continued from 115 to 130. She was very nervous, restless, and obtained but little sleep. Sedatives and hypnotics seemed to have but little effect. She had never been able to take opiates of any kind. I gave morphine hypodermically, which only aggravated her nervousness. Her restlessness was best quieted by sponging the temples with warm water, which was done every hour or so. Pulse and tempera-

ture became normal in the third week, after which she rapidly gained strength and is now quite well, the dysmenorrhœa being entirely relieved.

Case V.—Mrs. S. C. T., Chicago, consulted me June 22, 1885. She was thirty-six years of age. Menstruation began at the age of fourteen, and had always been regular and free from pain till the beginning of her present trouble. When twenty-three years old she was married, had given birth to two children, the youngest being ten years of age. Previous to the present disease her health had always been good. She dated the beginning of her illness from January, 1884. She complained of slight pain, pressure or heaviness in the region of the right ovary, and in about two months after that the abdomen was observed to be growing larger. For some time she was treated by her family physician, who considered her to be pregnant till the lapse of several months, when he told her she was suffering from a morbid growth and counseled her to seek surgical advice. For several months previous to her calling upon me she had been treated by manipulation from a "magnetic physician." The last three menstrual periods had been irregular and the flow much diminished. There was no œdema of the lower extremities. Recently the distention had seemed to increase much more rapidly than before. The abdomen appeared to be uniform in shape, soft, elastic, and over the entire surface fluctuation could be obtained. On making a deep and sudden pressure with the hand below the umbilicus a tumor could be easily detected, which floated in the surrounding fluid and could be easily displaced from one side of the abdomen to the other. The sound, when introduced into the uterus, entered to the extent of two and a half inches. Movement of the tumor did not seem to materially affect the uterus.

Percussion gave resonant sounds in the umbilical region, while the surrounding surface was dull.

My diagnosis was ovarian tumor, probably complicated with ascites. I advised an immediate operation. Patient shrank from the ordeal and decided to defer, at least for the present, any surgical treatment. On the 30th of July she again consulted me. She had increased in size several inches and was much emaciated. Using the same antiseptic precautions as in the previous cases, the operation was done at her residence, August 2, 1885. I was assisted by Drs. Anna Thomas and Henry Plumb. The anæsthetic was administered by Dr. King, Present, Mr. Reed, medical student.

An incision three inches long was made in the usual region, below the umbilicus, and the various tissues divided down to the peritoneum. The walls of the abdomen were very thin and but little hæmorrhage occurred. Immediately upon making a slight opening into the peritoneum, a thick, dark-colored, colloid-appearing fluid gushed out, showing the great tension of the abdominal walls. This fluid resembled so closely the contents of other ovarian cysts I had seen, that I was for the moment fearful that there might be some error of diagnosis and that I had entered the cyst itself. But on making further examination, by introducing the finger deeply through the opening, the tumor could be easily felt floating in the abdominal cavity. The incision through the peritoneum was now enlarged to an extent equal to that of the other structures, and the abdominal cavity emptied of the fluid. The trocar was then introduced into the tumor, but no fluid was obtained save a few drops of thick gelatinous material, which was evidently too viscid to flow. The trocar was then withdrawn, the incision extended to the umbilicus, and I introduced my hand,

breaking down the central structure of the mass. I finally drew it through the opening. There were no adhesions. The pedicle was about two inches broad, springing from the right ovary and broad ligament. It was secured by the "Staffordshire knot" of Chinese silk, No. 17, the tumor excised and the stump well seared with Paquelin's cautery.

The "toilet of the peritoneum" was thoroughly done with water, at 98°F., till the current returned nearly or quite colorless. The abdomen was closed with six interrupted silk sutures, and remembering the large quantity of peritoneal fluid, and thinking that more might be secreted, a Thomas drainage tube was introduced into the lower angle of the wound, extending to the *cul-de-sac* of Douglas. The usual carbolyzed dressing was applied. Symptoms of collapse being manifest, brandy was given hypodermically, and the patient placed in bed surrounded with bottles of hot water. In about half an hour reaction took place. As the patient was restless and seemed inclined to vomit, a hypodermic injection of morphine was administered.

The operation was completed at 11 A. M., just one hour having elapsed since the first incision was made. On visiting the patient again at 6 P. M., I found the pulse 108°F. and temperature 99°F. She had vomited once at 2 P. M., but otherwise had rested quietly. One tablespoonful of milk was given every two hours, which seemed to agree well with the stomach. On the next day, 8 A. M., pulse was 105 and temperature 101°F. She complained much of pressure or pain in the region where the drainage tube entered the abdomen. I removed the bandage, found the wound in an apparently good condition, and, as there was no appearance of drainage through the tube, I removed it.

August 4th, 7 A. M.—Pulse 117 and temperature 108.8°F. Stomach in good condition and patient craving food.

August 5th.—Pulse 105 and temperature 100.8°F. Nurse stated that the dressing appeared saturated with discharge from the wound. On removing the bandage I found the abdomen slightly distended and a bloody serum oozing through the lower angle of the incision.

On making a slight pressure I caused the discharge of something like an ounce of fluid, and then again applied the dressing.

August 6th, 8 A. M.—Pulse 100 and temperature 99°F. Serum still discharging. Applied fresh carbolized dressings.

August 7th, 8 A. M.—Pulse 105 and temperature 100.8. Patient very restless. Bandage was saturated with the discharge, which gave a strong odor. I removed the dressing, and taking a No. 10 Nelaton's catheter I introduced it through the lower angle of the wound several inches into the abdominal cavity, and using a common hand syringe I pumped out two ounces of very offensive pus. Using a solution of five grains of carbolic acid and ten grains of chloride of sodium to a pint of water, at a temperature of 98°F., I washed out the abdominal cavity till the water returned clear and odorless. Left the catheter in position.

Aug. 8th, 8 A. M.—Pulse 100 and temperature 100.4°F. Patient had slept well and expressed herself as feeling much better since the operation of washing out the abdomen the evening before. Found pus oozing from the catheter and the wound. Applied the syringe and withdrew an ounce of pus and washed out the cavity. At 8 P. M., pulse 95 and temperature 100°F. Again withdrew an ounce of pus and repeated the cleansing process. Removed the catheter and used instead a glass drainage tube, which I had myself made from a common glass tube, bending it in a spirit flame to the shape required. In a few days adhesions formed and an artificial wall seemed to be growing, so that the injection did not pass over the

entire cavity of the abdomen, and each day it seemed to contain less fluid. This process of cleansing the abdominal cavity was repeated twice a day for two weeks, till August 27th, when the cavity was so far healed as to admit the drainage tube only an inch, and it was removed.

At the time of making this report all discharge has ceased, and but a slight abrasion remains in the location of the wound. Weight of cyst and fluid estimated at thirty pounds.

A subsequent examination of the cyst showed several small openings. Through these, undoubtedly, the fluid had escaped, and so caused the accumulation in the abdominal cavity.

From a careful review of the above five cases of ovariectomy, I am led to the following conclusions :

1st. That success, however much it may depend upon any mode or plan of operating, is also largely controlled by strict attention to the minutiae which relates to the patient and the surroundings.

2nd. That thorough cleanliness is a great desideratum, and is best insured by a close adherence to what we call "antiseptic precautions."

3rd. That while recognizing the wonderful absorbing power of the peritoneum, we should be encouraged, in the intra-peritoneal method, to entirely close the abdominal incision. Still, this absorbing tendency may be impaired or destroyed by the long continuance of fluid in the abdominal cavity, and in these cases drainage is indispensable.

4th. That an opiate of some kind, possibly morphine hypodermically administered shortly after the operation, fortifies the nerve centers, brings on better reaction, and by quieting peristaltic action of the intestines, gives rest to the wounded parts, and in this manner hastens and assists to a more rapid start towards recovery.

240 Wabash Avenue.

HOSPITAL REPORTS.

COOK COUNTY HOSPITAL.

A SUMMARY OF THE FORTY-ONE CASES OF TYPHOID FEVER TREATED IN COOK COUNTY HOSPITAL DURING THE MONTHS OF JULY, AUGUST AND SEPTEMBER, 1883.* *Reported by* FRANK S. JOHNSON, M. D.

Nearly all of these patients were from our foreign population. Their nationalities were :

Swedish, 9; Norwegians, 2; Danish, 1; German, 14; Bohemian, 1; Swiss, 1; Polish, 1; English, 1; Irish, 6; American, 4; not recorded, 1.

Very many of these patients were recent arrivals in this country, and were without homes. It would, therefore, not be right to infer from this list that greater prevalence of this disease exists among foreigners than among the native born. It simply shows a greater number of homeless sick among that class. A similar preponderance of foreigners will be found sick of almost all other diseases treated in this hospital.

The ratio of the sexes does not conform to that usually observed. Twenty-eight cases were males, twelve were females.

In one case no record of the sex was made.

This unusual predominance of the disease among males cannot be taken as the proportion of males to females attacked in our community during that season, for the number of males in the hospital is constantly more than double that of the females, and naturally so, because there are more homeless

* Cases still under treatment on October 1st are not included.

men than women in a community to which there is great immigration. This fact detracts from the value of any conclusions as to the frequency of disease among either sex, based upon the records of this hospital.

Their ages were recorded in thirty-six of the forty-one cases. Of these thirty-six cases, twenty-two were between the ages of eighteen and twenty-five. Two were under eighteen years. The others were all under thirty-five, except one, an old lady of sixty-seven years, with malarial complication.

The mode of onset, as recorded, may, in most cases, be regarded as fairly accurate, but the value of the conclusions is somewhat lessened by the conditions attending the obtaining of the data, for on admission to the hospital, some of the patients were very dull, and their statements were unsatisfactory.

In four of the forty-one cases no history of the onset was obtainable. In thirty-seven cases a history of the early stages was elicited. In seven of these there was well-marked chill; of these, one was a mild case. Three were moderately severe cases, two were severe cases and one was fatal.

There was slight chill in one case; the case was a severe one.

Chilly sensations occurred in ten cases; of these, one was a mild case, five were moderately severe, two were severe cases, and two were fatal.

In the remaining nineteen cases, with records of onset, there was no mention of chill, and there probably was none.

Epistaxis, at the onset, is recorded in thirteen cases; of these, one was a mild case, three were moderately severe, six were severe cases, and the other three were fatal.

Vomiting occurred in six cases early in the attack. In two of these it recurred occasionally throughout the attack. In

two other cases where it occurred there were evidences of peritonitis, and it occurred in one fatal case of peritonitis.

The bowels were loose at the onset, or early in the attack, in six cases. In two they continued loose throughout the illness, and one of these died of intestinal hæmorrhage. In four the bowels became torpid, later in the course of the sickness; of these, one had prolonged, moderately high, but very variable temperature. The heart's action was very weak. The patient died on the fifty-first day.

In seventeen cases the onset was accompanied by diarrhœa.

In thirteen of these the diarrhœa persisted during the entire illness. Two were mild, five were moderately severe, and three were severe cases. Three were fatal cases. Of these one died of peritonitis after perforation of the intestine; one after profuse intestinal hæmorrhage. This patient had also, at the time of death, a temperature of 108° F. In four of the seventeen cases the bowels later became torpid or constipated. One of these died of peritonitis.

The bowels were regular at the beginning of the sickness in six cases. Only one was a severe case; and in only one, a moderately severe case, did the bowels later become loose.

The bowels were constipated in nine cases. In seven they remained so throughout. Of these, two died. In two the bowels became loose; one of these died of peritonitis.

The bowels were irregular at the beginning in two cases. In one they became constipated. This patient died of peritonitis. In the other, a mild case, they became loose.

The state of the tongue usually varied greatly during the progress of the attack, frequently changing from dry to moist, or *vice versa*, sometimes within a few hours. The fact of these variations prevents a satisfactory statement of the conditions of the tongue in the various phases of the disease. Neverthe-

less, the average condition of the organ during the periods of maximum temperature may thus be given.

In eight cases there was a moist, pasty coat during the period of highest temperature. Of these, three were mild, one moderately severe, and four quite severe. Not all of the latter had excessively high temperatures, but some of them were sick for a long time.

In one moderately severe case the tongue remained red and moist throughout, although the teeth and lips were dry and covered with sordes.

Dryness of the tongue is noted in six cases. Dryness, with whitish coat, in five cases. Two of these were mild, two moderately severe, and was one fatal death from peritonitis occurred on the seventeenth day.

The tongue was dry and brown, and the mouth very foul, in eleven cases. One was moderately severe, two severe, and seven were fatal cases.

It was dry and red and denuded in four cases, all severe.

This summary merely exemplifies the fact that, as a rule, the higher the fever, the dryer and fouler the tongue, but the importance of attention to this organ does not appear.

Its great value lies in the fact of the daily variations. It is often the barometer which furnishes information of the activity or sluggishness with which the functions of life are carried on.

Examinations of the chest showed normal conditions throughout the illness in twelve cases. Of these, two were mild, four were moderately severe, and four were severe cases. Two were fatal; one of these died of peritonitis, the other of exhaustion.

The respiratory sounds were rough in two mild cases; very harsh and dry in one case, a fatal one.

Râles were found at bases of both lungs in eight cases. Four were moderately severe, two were severe cases, and two were fatal. One died of peritonitis and one of intestinal hæmorrhage.

Râles were found extensively over one lung in two cases, one moderately severe, one fatal from perforation of intestine, which occurred at the height of the illness.

Râles were heard extensively over both lungs in five cases, two of which were severe, and three were fatal. Two died of peritonitis, one on the fifteenth and the other on the seventeenth, and one of intestinal hæmorrhage on the twenty-fourth day.

In two cases, one of them fatal, there was unmistakable phthisis.

In most cases the bronchitis was developed only after some days of continuous, rather high temperature.

In nine cases there was no note of the condition of the chest during the height of the fever.

Examinations of the abdomen were not recorded in six cases.

In three cases there was no abdominal tenderness.

In sixteen cases there was pain or tenderness limited to right iliac region.

In one case tenderness limited to the right and left iliac regions.

Diffuse abdominal pain existed in seven cases.

Diffuse abdominal pain greatest in the right iliac region in four cases.

Diffuse abdominal pain greatest in both iliac regions in two cases.

Diffuse abdominal pain greatest in the epigastric region in two cases.

There was moderate tympanites in nineteen cases. Tym-

panites with great distension of the abdomen in six cases. Three of these were fatal cases of peritonitis. The other three were dangerously sick but there was not conclusive evidence of peritoneal involvement.

The abdomen was very lank in two cases, one mild, the other died rather early of collapse due to perforation. The temperature had not been above 102.5° F. In the remaining cases the degree of abdominal fullness was not noted.

Gurgling was noted in only ten cases of the thirty-five in which the abdominal signs were recorded.

In three cases the absence of spots was recorded.

An eruption was recorded in eighteen cases. In these the eruption was confined to the abdomen in twelve cases. It was scattered over whole trunk in six cases. In some of the latter a few spots found upon the extremities.

The papules were not typical in every instance, but in some were much more raised than usual, and in a few instances became pustular.

In three cases the absence of an eruption is recorded. In the remaining cases there is no note of the presence or absence of spots.

The liver was notably enlarged in two cases, and the spleen in three cases, all of which were severe and one died. No doubt many cases of splenic enlargement escaped notice.

The mental condition during the height of the fever was not recorded in eleven cases.

In one moderately severe case the patient was bright throughout the illness.

In one quite severe case the patient had no other mental disturbance than dizziness.

Eleven patients were dull, of these two were mild, six were

moderately severe, one was a severe case, and one patient died early in attack from perforation of intestine.

In five cases the patients were very stupid.

One of them was a moderately severe case, and four were fatal.

Restlessness was a well-marked symptom in three cases, one was a moderately severe case, and two were quite severe. In the first of these the restlessness was only marked at night, when the temperature was highest (103.5°). During the day the patient was dull.

Moderate delirium occurred in seven cases.

One of these patients had a mild illness; the highest recorded temperature was 102° , with a pulse of 84, and the tongue remained moist at the edges throughout the illness. It occurred in two moderately severe cases, in one of these coming on only at night when the temperature was highest ($103-104^{\circ}$). Four of the patients died.

Two patients were wildly delirious; both died.

The date of highest temperature was not known in fourteen cases. These were admitted to the hospital late in the course of their illness.

Eight cases reached the highest temperature during the first week in bed. In two of these it was 102.5° . In two between 103° and 104° . In four between 104° and 104.5° . One of these patients died, upon the sixteenth day, of peritonitis. The temperature was irregular, varying between 101° and 104° in the evening.

In another case the temperature ranged between 103° and 104° in the evening at the end of the first week, the pulse ranging between 92 and 112, and the respiration about 40. At end of the second week the temperatures were 99.5° to 100° , pulse 78, and respirations 52. There was broncho-

vesicular respiration over the upper left lobes of both lungs, accompanied by moist râles, but there was no dullness and no note of pain, or of abnormal physical signs at bases of lungs. Recovery was perfect. There were other cases of very rapid rapid respiration, but this was peculiar, in that the rate of breathing increased after the temperature and pulse-rate had fallen.

Nineteen cases reached the maximum temperature during the second week of illness. In two of them the highest recorded temperature was 102° to 102.7° . In four cases, 103° to 103.2° ; of these, one died, on the twelfth day, of peritonitis.

In eight cases the temperature was 104° to 104.8° . One died, in the third week, of peritonitis. The temperature continued high until death. Another died of asthenia. The remaining cases were not very severe.

In four cases the temperature reached 105° to 105.2° . Of these, one died of exhaustion.

Of those admitted late in the course of their illness, three were convalescent, two were in the second and one in the third week of illness. Another, admitted during third week, with a temperature of 103° , improved rapidly in the hospital. Ten were very sick. Of these, two were admitted in the second week. One had a temperature, on admission, of 104° . The patient died of intestinal hæmorrhage. The other had a temperature of 103° , and reached the maximum, 104.6° , during the fourth week, and then convalesced slowly. Six were admitted during the third week. One of the patients died, in the fourth week, of collapse, due to perforation of bowels.

Of those admitted later than the third week of their illness, two had temperatures, on admission, of 105° . Both died.

In two cases the temperature was 104° . One died of asthenia, the other of peritonitis. In the latter the temperature-

curve, after admission, was very variable, the evening range being from 104° to as low as 98.5° . The day before death it was 97° ; on the morning of death it was 101.8° .

One patient was admitted during the fifth week with a relapse of the fever. The evening temperature varied between 99° and 103° .

Two relapses occurred in the hospital, brought on by overheating and over-exertion. In these cases the temperature was high, ranging between 104° and 105° , but the patients did not otherwise seem very sick, and did not complain of feeling so. They were not delirious, or were only flighty at night.

These observations show that in the cases under consideration a rapid rise to maximum temperature, attained in the first week or early in the second week, was not especially dangerous; whereas a more gradual rise and a later attainment to the maximum, even though the elevation was no higher than in the former cases, increased the danger in a marked degree.

It is difficult to estimate the effect of temperature upon the cerebral functions. Prolonged elevation of temperature is evidently an important factor in producing disturbance. But in relapses, very high temperatures without much mental derangement were observed, and this, too, at a time when the forces of life had been taxed severely by the preceding illness, and when the patient would be expected to succumb much more readily. It is true that in relapses the temperature, though high, was not prolonged, and in this they resembled those cases in which the disease runs a rapid course with uninterrupted defervescence. There was, in the relapsed cases, even less disturbance than in primary cases of short duration, with high temperature. Besides this, mental hebetude sometimes came on in the primary attacks before a very high elevation of temperature occurred.

Little can be gathered from the pulse-record in these cases beyond what has already been shown in the temperature-lists, for, with very few exceptions, only the frequency of the pulse was recorded.

Records of the character of the pulse are not sufficiently full or numerous to be of value.

Complications occurring in the course of sickness:

Hæmorrhage from the bowels occurred in five cases, of which three were fatal—one died later of asthenia.

Epistaxis during the course of the illness occurred in three cases, one required plugging of the anterior nares.

Peritonitis occurred in three cases—all fatal.

In a number of other cases there were some evidences of peritoneal inflammation, but it is difficult to say in just how many the complication occurred.

Perforation of intestines occurred in two cases—both fatal; one of peritonitis, the other of collapse.

Parotiditis occurred in one case during convalescence—after recovering from this the patient had crural phlebitis.

This patient's temperature, previous to the inflammation of the parotid gland, had reached normal, but had not become established there. The trouble was accompanied by an elevation of temperature of 2° . This existed with scarcely any remission for a day or two; it then fell to normal.

Crural phlebitis occurred in two cases, both convalescent, and in both the temperature had reached normal. In one case, the patient just mentioned, it occurred on the right side. There was a rise of temperature above normal to 101.8° . The temperature remained up three or four days.

In the other case the trouble was on the left side. The elevation of temperature was not quite so great as in the first case there was also a slight relapse after the patient was nearly well.

Mastitis occurred in two cases. In one the patient was seven months advanced in pregnancy. The trouble occurred late in convalescence, after the temperature had been normal for eight days. The inflammation was slight and of short duration. The temperature rose to 100.5° . The other patient had been nursing a child previous to her illness. She was very sick and died on the twelfth day.

One patient during convalescence experienced great difficulty and distress in voiding urine. It became necessary several times to relieve her by catheterization. The urine was normal.

In two cases there was well-marked periodicity in the temperature curves—the evening temperature rising higher every other day. In each case convalescence was long.

One patient was seven months advanced in pregnancy. She had been sick three weeks on admission. At that time the evening temperature was 103.6° . There were marked morning remissions and the temperature was evidently falling. It reached normal in ten days. She did not miscarry.

The duration of the illness was in 1 case 3 weeks.

"	"	"	"	4	"	4	"
"	"	"	"	9	"	5	"
"	"	"	"	3	"	6	"
"	"	"	"	1	"	7	"
"	"	"	"	7	"	8	"
"	"	"	"	2	"	9	"
"	"	"	"	1	"	10	"
"	"	"	"	1	"	12	"

There were twelve deaths, or about 30 per cent. of the cases treated. Five died of asthenia without complication. Two died during height of fever, the length of the illness was not known. The other three on the 20th, 22d and 51st days respectively.

Three died of peritonitis on the 12th, 16th and 17th days.

One of perforation of the bowel and collapse on the 25th day.

One of perforation and peritonitis ; the length of the illness was not known.

One of intestinal hæmorrhage on the 22d day.

One on the 12th day after severe intestinal hæmorrhage on the morning of her death, and with a temperature at the time of death of 108°.

The treatment was principally expectant.

Tonics and mineral acids were given in all cases. Whisky and digitalis were given when needed.

The sponge-bath and the cold-pack were used to reduce the temperature. In several cases quinine was given in doses of 15 to 20 grains with good effect, but usually a more prompt reduction followed the use of cold.

In two cases, where the intestines were greatly distended by gases, the rectal tube was used, but without relieving the patient. Charcoal and turpentine by mouth gave little, if any, relief.

Turpentine enemata afforded slight temporary relief.

In intestinal hæmorrhage ice was applied locally, ergot was administered internally or hypodermically. Absolute rest was enjoined.

In peritonitis, opium was given and turpentine stupes and hot fomentations applied.

In excessive restlessness and delirium, bromides or morphine were given at night. These cases usually needed very energetic stimulation as well.

Intercurrent local inflammation, such as mastitis, parotiditis and phlebitis, were managed with hot anodyne applications. There was no general treatment except the quinine and acid tonic.

Glenoin was used in one case as a heart stimulant, but without good results. The case was a very unfavorable one, and terminated in death on the 51st day, after the patient's extremities had been cold and blue for a good many days.

ST. LUKE'S HOSPITAL.—A CASE OF MULTIPLE ABSCESS OF THE LIVER. *Reported by* FRANK CARY, M. D.

Matthew F., a medium-sized Irishman, of temperate habits, fifty-five years old, a stone-cutter by trade, was admitted to St. Luke's Free Hospital, September 1st, 1884, with a diagnosis of typhoid fever.

He gave a history of perfect health up to within three weeks of his admission to the hospital, when he began to suffer from headache, anorexia, profuse diarrhœa, and general malaise. There were no chills. The diagnosis of typhoid fever was questioned.

On admission, no tenderness could be detected in the region of the liver, or elsewhere over the abdomen. The patient, although very much exhausted, was not markedly emaciated. The stools were similar in appearance to those in typhoid fever of the third week. On the first day the temperature was normal. On the second day, by 6 P. M., it rose to 103°. On the third day it was normal in the morning, but gradually rose until 10 P. M., when the patient died, apparently from exhaustion.

The autopsy, twelve hours later, revealed the following conditions: The liver was completely riddled with abscesses, there being no less than twenty-four, varying in size from a hickory nut to a goose egg, and filled with dark, brownish pus, having no appreciable odor. The lobulus Spigelii was al-

most entirely destroyed by a large abscess. The organ, as a whole, was nearly normal in size; it was adherent to the diaphragm, the anterior abdominal wall, and to the transverse colon. There were different abscesses pointing in these several localities; of them, only one, that attached to the diaphragm and in the right lobe, seemed ready to rupture.

The colon, from the ileo-cæcal valve to the sigmoid flexure, was lined with ulcers. These coalesced so as nearly to obliterate the mucous membrane within these limits. The remaining intestinal tract was normal. The spleen was neither enlarged nor softened, as it was in a somewhat similar case reported by Dr. Peabody, of New York.* The gall bladder was normal, and contained the normal amount of bile. It should be stated that this patient had for years been a resident of Chicago, and had never lived in the tropics.

Are we not justified in believing that these intestinal ulcers and the abscesses of the liver stand in the relation of cause and effect? Coats, in his pathology (page 587), in discussing the point, says he thinks this view is not, however, beyond question.

3027 Indiana Avenue, Chicago. Ill.

* *Medical Record*, January 3d, 1885.

EDITORIAL.

THE NINTH INTERNATIONAL MEDICAL CONGRESS.

In another part of this number of *THE JOURNAL AND EXAMINER* will be found the report of the meeting, in New York, on September 3d and 4th, of the enlarged Committee of Arrangements appointed by the American Medical Association on preliminary organization of the ninth International Medical Congress. Examination of that report will make manifest the fact that that Committee acted with wisdom, and a commendable desire to rectify, as far as it was practicable to do so, mistakes that, it was apparent, had been made.

It eliminated the so-called code question; it abandoned the idea of making the congress a representative body, thus restricting membership as had never been done before, and it made the conditions of membership as liberal as in any previous congress; it declared against assigning to any one individual multiple offices, and proceeded to fill vacancies found to exist.

After it had established the sections and appointed presidents for them, it framed rules for the government of the congress, and then organized an Executive Committee, to consist of the officers of the congress,⁵ including the presidents of the sections, and authorized that Executive Committee to add to its membership a limited number of representative men in the medical profession, whose coöperation might be desired.

Having thus arranged the preliminary organization of the congress, the Committee of Arrangements considered that it

had practically accomplished the work for which it had been created, and it resigned the remaining details to the Executive Committee.

This result indicates that this Committee of Arrangements, from which many seemed to fear so much, showed that it comprehended the responsibility of the important duties assigned it, and realized the difficulties under which these duties had to be performed, and that it discharged them, under these trying circumstances, in a manner that must commend itself to the thoughtful and the unprejudiced, even if they had wished to see a result different in some respects.

When it had realized the mistakes previously made, and had done what could be done to remedy them, and had faithfully discharged the trust confided to it, it surrendered its delegated powers to its successor, without having appropriated to itself the offices of the congress, which its opponents charged was one of its objects. In its comprehension of its duties, as trusted medical men, assigned a difficult task and surrounded by embarrassments, it showed capability, fidelity and a degree of unselfishness not unworthy of imitation. The result is before the medical profession of the world, and it will be judged of by its merits.

Sufficient time has now elapsed since the last annual meeting, in New Orleans, of the American Medical Association, to have given an opportunity to weigh calmly our duty as medical men. Whatever may have been the mistakes made, as many believe, at that meeting, there seems now to be no good reason why those who felt aggrieved by, or who could not approve of, some of the acts, or the results of the acts, of the Association in that meeting, should not now take part in the effort that is being made to redeem the pledges given at Copenhagen in behalf of the medical profession of the United States. The

removal of the congress from the United States, as advised by some and apparently hoped for by others, would be a lasting disgrace to American physicians; and it is difficult to comprehend how any of those, whom we all respect, can so complacently anticipate such a result of the unfortunate dissension, which has already lasted too long. Americans have usually been credited with not being wanting in a desire to preserve their good name, or to keep their faith when pledged. We not only have patriotism enough but also regard enough for the honor of the medical profession of our country to be unwilling to believe that differences of opinion will be allowed to sway us to such an extent as to destroy all prospect of holding a successful congress in Washington in 1887. Let it not be said of our profession that personal pique influenced our action beyond all reason. For the good of the cause, for the sake of humanity and science and patriotism, as well as for the love of our profession and its good name, let dissension cease, and, in a spirit of justice, fairness, and conciliation, let the mistakes of the past become a matter of the past, and let a united effort be made to make the congress what it ought to be. The occasion is too great and the differences are too small to warrant jeopardizing of the prospects of the congress.

THE REPORTS OF THE TRANSACTIONS OF CHICAGO MEDICAL SOCIETIES.

During the past year, the members of the various Chicago medical societies have at last awakened to the importance of correct reports of the transactions.

At the meeting of the CHICAGO MEDICAL SOCIETY, held May 18th, 1885, resolutions were passed providing for a Committee on Publication. This Committee was authorized to secure

the services of a stenographer, revise the short-hand report, and attend to the publication of the transactions.

DOCTOR E. J. DOERING and PROFESSOR D. W. GRAHAM were appointed members of this Committee, and DOCTOR J. A. ROBISON was chosen as the reporter. In order to secure faithful and complete reports of the transactions, the coöperation of the members participating in the discussions was solicited. The committee offered the following suggestions:

"I. Deliver to the reporter copies of all papers on the evening they are read.

"II. The reporter will hand each member a copy of the remarks, made by him during discussions, for his revision. This revision, to be published, must be returned to the reporter before noon of Thursday following the meeting of the society.

"III. The reporter, when necessarily absent, is authorized to have an alternate to perform his duties, who is entitled to the same recognition and coöperation as the reporter himself."

A very marked improvement in the character of the reports of the transactions of the CHICAGO MEDICAL SOCIETY, under the new *régime*, is apparent to the most casual observer.

A slightly different method has been adopted in the reports of the transactions of the CHICAGO GYNÆCOLOGICAL SOCIETY. Each Fellow, participating in a discussion, is requested to send a *résumé* of his remarks to the editor within the space of one week. Otherwise the remarks are omitted.

It is certainly very annoying to see one's remarks, in a discussion, emasculated, distorted beyond all recognition, published in a number of medical journals and widely circulated. Misrepresentation, as the result of the reporter's perversity or carelessness, is not at all infrequent. Under such circumstances, the reporter richly deserves censure. As a matter of fact, he is sure to come in for a full share of vituperation, whether

merited or not. In all debates, there is much irrelevant talk. In medical discussions, the feature of prolixity and wandering from the subject is particularly prominent. Few medical gentlemen know how to express their ideas *clearly, distinctly and adequately*. On the contrary, their conceptions are usually *obscure and confused*.

MR. BAYNES has appended to his translation of the *Port Royal Logic* a complete translation of LEIBNITZ's tract on the *necessary characters* of perfect knowledge. A careful study of the little tract by the members of any society would lessen the reporter's labors.

In the heat of discussion, the words of the debaters are not always characterized by accuracy of statement. A few months since, a distinguished gynecologist made the remarkable assertion that he had seen three cases of epithelioma of the *glans penis* result from copulation with women, whose crevices were the seat of carcinoma. A mortifying withdrawal of the remark followed, and the heat of discussion was urged in palliation.

The "accidence and syntax" of English grammar is constantly violated, and Dr. CAMPBELL's canons are held in derision. Then there exists in the medical mind, a profound contempt for the "necessary laws of thought." Premises and conclusions, utterly at variance, are combined in a rambling, disconnected way, in total defiance of the laws of the syllogism. Fallacies,—logical and material,—exceed in kind and number those described by MR. JOHN STUART MILL. To bring order out of such chaos requires the continued exercise of a high degree of mental energy. Time, patience and attention are required to make the remarks clear, concise and relevant.

The plans adopted by the CHICAGO MEDICAL AND GYNÆCO-

LOGICAL SOCIETIES are designed to conciliate the members and secure a more creditable account of the proceedings.

They fail utterly to produce a truthful report of the transactions. On return home, the library is consulted in a perfectly calm mood, and a radically different tale is the usual resultant.

DOMESTIC CORRESPONDENCE.

A PRIMER LESSON IN "METAPHYSICS."

TO THE EDITORS OF THE *Chicago Medical Journal and Examiner*.

Gentlemen:

When the first sporadic cases of "metaphysics" appeared in this city, directly after its importation from Boston, the following conversation took place between our esteemed medical friend, Dr. T., and one of the most noted and successful practitioners of the art in the Northwest. Dr. T. took an early opportunity of calling on the metaphysician, with whom he had a slight acquaintance. After apologizing for the intrusion, he said:

"Doctor, have you any knowledge of medicine?"

Metaphysician. "No, sir; that is not necessary to the practice of our mode of healing."

Dr. T. "Do you know anything of anatomy and physiology?"

Metaphysician. "No, sir."

Dr. T. "What is disease?"

Metaphysician. "There is no disease. The body and all its functions are mere ideas; therefore so-called 'disease' is only a suffering belief. We go farther and assert that matter is a function of mind. For example: The mantel (pointing to

an ordinary marble mantel) you now look at has no real existence. You fancy that it has, and add certain properties, as hardness, color, etc., as unsubstantial and unreal as the thing itself."

Dr. T. "How do you account for organic disease, for instance, a broken bone?"

Metaphysician. "The bone is not broken; the patient merely has the idea that he has sustained a fracture. After a certain course of treatment, as you term it, he recovers from this false idea and is again restored. I endeavor to at once correct the false idea."

Dr. T. "Since, Doctor, you have no body, and the mantel has no existence, will you kindly strike your head violently against the mantel? Of course, you will sustain no injury, as the mantel, your head and the act itself are merely ideas, and you can immediately apply the necessary correction."

Metaphysician. "I do not care to experiment."

Dr. T. "Have drugs any action on the system?"

Metaphysician. "Certainly not."

Dr. T. "Either good or bad?"

Metaphysician. "No."

Dr. T. "I have, Doctor, a substance in this vial generally considered poisonous. You can have no objection to convincing me of the truth of your assertions by swallowing a little?"

Metaphysician. "As I said before, I do not care to experiment."

Dr. T. "Good morning, Doctor."

Metaphysician. "Good morning."

"Metaphysics" has had an unusual rise and extension since its first advent a little more than a year ago. It has numbered many thousands of our wealthy and intelligent citizens among

its advocates. One family of "practitioners" have made thousands of dollars in the past year. A prominent physician on the West Side stated that they made great inroads into his practice. The desertions were not singly or by families, but literally in squads. His patients have mostly all returned disappointed, if not wiser. A patient affected with spasm of the eyelids, due to marked unilateral myopia, was treated daily for *five months*. Another nearly lost her life from hæmorrhage due to a uterine fibroid. A man presented himself at the Woman's Medical College for a diagnosis. He said he did not want treatment, but merely came there to inform the faculty how bad his case was, that they might be convinced of the truth and success of "metaphysics." The diagnosis was phthisis in the third stage. He is dead now.

We should like to know if there is any way for the State Board of Health to reach this kind of quackery. Perhaps the best way is to let it run its course. It will soon take its place with blue glass, magnetism, spiritual healing, etc., as a curiosity of medicine. There is not and perhaps ought not to be any law to prevent a man from making a fool of himself, if he wants to.

Yours truly,

MEDICUS.

TO THE EDITORS OF THE *Chicago Medical Journal and Examiner*:

Gentlemen:

The following case of poisoning by *muriate of cocaine* may prove interesting to your readers:

Mrs. S., age twenty-five, of good constitution, has been using a two per cent. preparation of cocaine, prescribed for hay-fever by a well-known physician of this place, with good success. September 2d, having exhausted the vial, her husband,

without a prescription, procured from a druggist two five-grain vials of the muriate of cocaine, full strength, of which Mrs. S., about 5 o'clock P. M., applied two-thirds of the contents of one bottle to both nostrils with a small glass insufflator. In fifteen or twenty minutes she became dizzy, her vision became dark, a sinking sensation occurred, with great weakness.

At 5.30 P. M. I was called. I found the patient in semi-comatose condition, from which she was easily aroused, but answered questions with difficulty. When so aroused, her mind was clear. Her temperature was above normal. Her skin was hot and dry. The radial pulse was very rapid, and so weak as to be scarcely discernible. Her pupils were widely dilated. Deglutition and articulation were difficult. There was some dyspnœa. She complained of dryness of her fauces and a bitter taste in her mouth. She complained also of cold shivers, and her teeth chattered, although her temperature was still above normal. Later she became drowsy; her eyes were closed and the muscles of her face affected. There was great weakness; she could not support her head. There was dyspnœa, but it was not severe. There was some nausea, but she did not vomit. Her extremities were cool and her mind clear when aroused.

She recovered in about three hours under stimulants (brandy and ammonia) and digitalis. Heat and friction were applied to her extremities, and heat over the epigastrium.

On September 3d, at 9 A. M., I called to see patient. She was feeling well and noticed no ill-effects from the drug.

90 Thirty-third street.

Yours respectfully,

G. W. KENNICOTT, M.D.

September 4th.

SOCIETY REPORTS.

TRANSACTIONS OF THE CHICAGO GYNECOLOGICAL SOCIETY.

Regular meeting, 17th July, 1885.

I.—NEWMAN. Some Considerations Relating to Shock and Nervous Influence in Parturition.

II.—FOSTER. On the Diet and Management of Artificially Fed Infants.

DR. W. H. BYFORD in the chair.

I. An inaugural thesis, entitled, "SOME CONSIDERATIONS RELATING TO SHOCK AND NERVOUS INFLUENCE IN PARTURITION," by HENRY P. NEWMAN, M. D., (Detroit Medical College, 1878), was read by the Secretary, DR. EDWARD WARREN SAWYER. DR. NEWMAN related the histories of three cases of nerve-exhaustion and shock, occurring during parturition. In conclusion, he desired to offer the following deductions:

"1st. That we have a higher nervous organization presiding over the process of childbirth and subjecting it to like influences and derangements which obtain in other physiological functions.

"2nd. As civilization advances, the co-relation of mind and matter becomes more intimate and complex, and calls for a proportionate advance in psychological therapeutics, and the application thereof to cases of predominant mental and nervous influences.

"3rd. In many cases of so-called tedious labours the irreg-

ular contractions of the first stage are the result of an exalted state of nervous irritability.

"4th. Active interference is indicated in many cases of protracted labour due to nervous influence, to guard against the dangers of exhaustion and shock.

"5th. Much is to be expected from judicious prophylaxis. Especially would I urge the necessity of direct professional supervision over the entire period of gestation from the earliest months.

"6th. There will still remain to be combated social, moral and educational environments, which we can scarcely expect to see abolished, until the laity, as well as the profession, is better informed as to the deleterious consequences of departure from the standard of physiological perfection in the mothers of our race, and the best means of approximating that equipoise of the mental and physical organization which it is primarily the design of nature to establish."

The paper is published *in extenso* in the CHICAGO MEDICAL JOURNAL AND EXAMINER, August, 1885.

DISCUSSION.

DR. HENRY T. BYFORD thought DR. NEWMAN's essay was of great practical interest. In every nation, savage or civilized, injurious customs gradually grow up in the methods of managing labour, and require a periodical weeding out. They affect both the profession and the laity, and are the principal causes of the troubles referred to, and should receive attention.

II. An inaugural thesis, entitled "THE DIET AND MANAGEMENT OF ARTIFICIALLY-FED INFANTS," by ADDISON H. FOSTER, M. D., (College of Physicians and Surgeons of New York, 1866), was read by the Secretary. DR. FOSTER's conclusions were :

"1st. The artificially fed city infant too often inherits an enfeebled nervous and physical organization.

"2nd. Its surrounding are rarely of an invigorating character.

"3rd. It usually has a desperate struggle for life with an imperfect diet, for even new milk from the prairie-fed Chicago cow is likely to be harmful.

"4th. The wonder is, that so many escape death at the hands of over-anxious but unwise attendants."

Dr. Foster's paper is published *in extenso* in the CHICAGO MEDICAL JOURNAL AND EXAMINER, August, 1885.

DISCUSSION.

DR. E. J. DOERING said, that as the majority of his patients were children, he had given the subject of infant-feeding a great deal of attention. He favored, of course, a wet-nurse, whenever the mother could not nurse, and always urged a removal into the country during the summer. If this was impracticable, he preferred condensed milk for the first three months. After that age, until the age of six months, he prefers a mixture of varying proportions, according to age, of barley-water and fresh cow's milk, to which a little sugar of milk is added. The addition of barley-water causes a mechanical separation of the particles of curd, and facilitates digestion. After the age of six months he allows farinaceous food to be added, preferring the preparation known as Imperial Granum. Mellin's and Horlick's foods are also valuable, particularly if there is a tendency to constipation. These two latter preparations may be given to young infants, if their digestive power is good. If there is much gastric derangement, he prefers peptonized milk, and believes that in the absence of mother's milk, cow's milk, properly prepared for the infant, answers every requirement.

PROFESSOR CHARLES WARRINGTON EARLE said, that the subject of infant-feeding was one of the most important which occurred to him in practice. He urged every woman to nurse her own baby, but if this was impossible, he suggested a wet-nurse.

Sometimes the circumstances of the family would not permit a wet-nurse, and the mother may furnish a portion of its nutriment, and the child comes up on a mixed diet—part mother's milk and part artificial food. But every year, more and more wet-nurses are employed, and infant mortality is lessened. If artificial food is used, there should be enough of it. Many children lose their lives every year from starvation, and this is particularly true if condensed milk is used; not that the condensed milk is not a good diet in some cases, but it is only condensed four or five times, and a sufficient quantity is not used to nourish the child. One teaspoonful to eight of some diluent will agree often with a very young babe, and in older children he gives from one-half to one can of condensed milk daily, diluted with barley or rice-water. Professor Earle's favorite food for a young babes, deprived of its natural diet, was cream and barley-water slightly sweetened and salted. Murdock's food, in doses of from one to ten drops, had been of value.

DR. H. T. BYFORD said: There is but one proper food, or basis of food, for infants under six months, and that is the mother's milk. There never has been a proper food for them that has not been prepared mainly from the milk of some animal.

Farinaceous articles, even when largely converted into glucose or grape sugar, as in the Liebig foods, cannot be digested in sufficient quantities to sustain vigorous life at this age. Whether mixed with diluted milk or not, they either induce acid indigestion, or else pass through the alimentary canal in sufficient quantity to absorb the natural secretions,

and appear at stool as hard, irritating masses. He has seen Ridge's food, which is so well adapted for older children, produce fatal entero-colitis when given during the first five or six months of life; and has seldom been able, in warm weather, to give Mellin's food, one of the best of the Leibig class, in more than quarter or half the amount necessary for nutrition, without sooner or later injuring their digestive systems. Indigestion, or poor nutrition, or both, are common proofs of the unfitness of the so-called milk foods, which contain cane and grape sugars and starch in large quantities.

Condensed milk, after proper dilution, is but cow's milk deprived of about one-half of its fat, the most important ingredient for these very young children. It often agrees well with the stomach, but, unless other food is given with it, produces very poorly-nourished children. Peptonized milk is better than ordinary cow's milk, chiefly because curdling and fermentative changes are prevented, and it does not call for much less solvent and absorbent power in the stomach, nor for much less bile in the duodenum than other milk. It is a degree better than milk that has been scalded while fresh, and several degrees worse than milk warm from the udder. The reason why goat's milk is often so well borne, is because it is drank as soon as milked.

Fat is, perhaps, the only artificial food that closely resembles anything found in milk, and as fat is easily digested almost from the time of birth, and is by far the most concerned in infant nutrition, it must be the chief constituent of their diet. Hence, while simple dilution may be the best method of treating milk warm from the cow, after it has stood awhile the upper third or quarter should be used, diluted with two or three parts of lime, or cracker, or barley-water, and slightly sweetened with sugar of milk. As an adjuvant, where none

but a very dilute diet is borne, he has seen Trommer's extract of malt with cod liver oil, in teaspoonful doses, or a little good bacon, taken with benefit.

On motion, DRS. HENRY P. NEWMAN and ADDISON H. FOSTER were elected Fellows of the Society.

W. W. JAGGARD, M. D., *Editor*.

233 Indiana avenue.

September, 1885.

TRANSACTIONS OF THE CHICAGO GYNECOLOGICAL SOCIETY.

Regular meeting, Friday evening, September 18th, 1885.

I. DUDLEY—*Remarks upon Abdominal and Gynecological Surgery in England, Scotland and Heidelberg.*

The PRESIDENT, DR. H. P. MERRIMAN, in the chair.

PROFESSOR E. C. DUDLEY made some informal remarks relative to his observations in gynecological and abdominal surgery, during a summer holiday, in Europe. His observations were confined to the work of a few operators in England, Scotland and Heidelberg.

In Heidelberg, he called upon PROFESSOR KEHRER. PROFESSOR DUDLEY inspected the hospital and saw evidence of considerable work in abdominal surgery. PROFESSOR KEHRER's laboratory gave evidence of active research into gynecological bacteriology. His work bore the stamp of thoroughness and efficiency. PROFESSOR KEHRER is a medium-sized man, frail and delicate, with a large head and small body.

A call upon DR. BANTOCK, at his office, No. 18 Harley Street, W., London, resulted in a pleasant hour's conversation upon subjects pertaining to ovariectomy and hysterectomy. Patients at the Samaritan Hospital sometimes die within twenty-four hours after laparotomy, with a high temperature. This

condition was called acute sepsis by certain systematic writers. DR. BANTOCK thought the true pathology of the condition was unknown, and was not satisfied with the term, acute sepsis. PROFESSOR DUDLEY saw DR. BANTOCK operate at the Samaritan Hospital. The first operation was the removal of a small, solid ovarian tumor. The remaining ovary and tube, although normal, were removed on account of a small intra-mural, uterine fibroid. The striking feature of the operation was great rapidity without haste. DR. BANTOCK caught up the edges of the peritoneum with small compression forceps, so that these edges were drawn up towards the cutaneous edges, and were held in this position by the weight of the instrument against the abdominal surface. This manœuvre greatly facilitated the passage of the sutures. The pedicle was secured by means of silk ligature, applied in the operator's peculiar figure-of-eight turns.

In closing the wound, a needle of ovoid shape, curved on the edge, instead of on the flat, was employed. This needle combines the maximum of strength with the minimum of size. Two or three sutures were passed through at each angle of the wound. Their ends were joined by knots. An assistant, passing the index finger of each hand through the loops thus formed, made traction at each angle of the wound, in such a manner as to draw its sides into contact, and to lift the peritoneal edges nearer to the surface. The introduction of the remaining sutures was in this manner greatly facilitated. The sutures were so closely passed that no superficial stitches were required. They were made to include a very narrow margin of skin and peritoneum, and very little if any muscular tissue. Fine silk-worm gut was employed.

The ends of the sutures, on each side of the wound, were now grasped in lock forceps, which prevented them from being

drawn out, or becoming tangled during the separation of the wound for the toilet of the peritoneum, which was most thorough, the entire cavity being rendered perfectly clean and dry. The lock forceps were then removed from the ends of the sutures, and the hands of the assistant substituted. The action was thus made on all the sutures, in the direction of the upper angle of the wound, and they were tied in order from below upward and cut short. This prevents tangling of the threads and otherwise facilitates tying. Antiseptics, throughout the operation, were conspicuous by their absence. The dressings were of the most simple character.

DR. BANTOCK kindly showed PROFESSOR DUDLEY over the hospital, which contained a number of convalescents from hysterectomy, ovariectomy and oöphorectomy. DR. BANTOCK'S exceptionally good results, in the last operation, are recognized throughout the world. His wonderful statistics in abdominal surgery are due to downright splendid operating. DR. MERIDITH, at the same time, was removing a tumor in another room, under the most extreme antiseptic conditions. The famous Samaritan Hospital is an unpretentious building, seemingly a large reconstructed dwelling, in the middle of a block, with houses joining on either side, and, like great men, has a modest appearance.

It is generally supposed in America that the Woman's Hospital in the State of New York, established by MARION SIMS in 1855, was the first of its kind in the world. This is a mistake. DR. SIMS himself, in a letter to DR. PROTHEROE SMITH, of London, dated July, 1883, accords to that gentleman the honor of having established the first hospital specially for the treatment of the diseases of women. This hospital, founded in 1842, is now a flourishing institution in London, and is called the Hospital for Women.

Its venerable founder visited Chicago a year ago. PROFESSOR DUDLEY again met him in London. His enthusiasm for the specialty, in which he has been a pioneer, continues, indeed, seems to increase with advancing years. He retains his official connection with the institution, as senior physician, and is still engaged in active practice. He was among the first, against bitter opposition, to advocate anæsthesia in labour. Efforts are now being made, with great promise of success, to raise funds for the construction of a larger and more appropriate hospital building.

PROFESSOR DUDLEY visited Birmingham, in response to a polite telegraphic invitation from MR. LAWSON TAIT. On the train he occupied the same compartment with a sleek, well-fed, high-church London clergyman of the most conservative order, who intimated in no uncertain manner that the conservative people of London looked down upon the inhabitants of the radical city of Birmingham as a semi-barbarous community. So decided were his denunciations of the radical party in general, and of Birmingham in particular, which as the chief stronghold of radicalism always return JOHN BRIGHT and CHAMBERLAIN to Parliament, that PROFESSOR DUDLEY in an apologetic manner explained that he was only going into the jaws of the Philistine to witness an operation by a distinguished surgeon, from whom he hoped to learn something. The clergyman inquired who the surgeon was, and upon hearing the name of LAWSON TAIT, exclaimed: "O, I know all about him, he is just as bad as any of them;" which means that MR. TAIT is a radical in politics, as he is in surgery.

MR. TAIT's ridicule of antiseptics is well-known. His rapid method of operating conveys to the casual observer the idea of haste and almost of carelessness.

But closer observation very soon shows him to be one of

those rare operators, where dexterity amounts almost to a sleight of hand. An ovariectomy, in his hands, does not impress the observer as a capital operation. It seems almost as trivial as opening an abscess. His methods of operating did not materially differ from those of DR. BANTOCK. In closing the wound he used but one needle, threaded with a piece of long silk, introducing this as if for a continuous suture, but did not draw the thread tight. After the introduction of the needle, he left a long loop before the reintroduction. Then, after taking the last stitch, he lifted the free loops of silk on the index finger, and severed them with the scissors, thereby converting the continuous into an interrupted suture. These were tied in the ordinary way, and the wound was dressed in a manner, which would be eminently acceptable to his most bitter antiseptic enemy.

During the day, MR. TAIT performed ovariectomy, lumbocotomy, perineorrhaphy, and excised a urethro-vulvar cyst, besides attending to a large number of consultations, in one of which PROFESSOR DUDLEY accompanied him to a distance of forty miles. This was for him only a moderate day's work. It is indeed evident that no other man in England controls a larger practice in abdominal surgery.

MR. TAIT impressed PROFESSOR DUDLEY as a sincere man of exceptionally strong and positive character and very much in earnest. Like VIRCHOW he is politically inclined; indeed, his temperament is such that he cannot see things go on without having a hand in them. He has taken active part in the city government of Birmingham, and as PROFESSOR DUDLEY was informed, had already declined to stand for Parliament.

During a brief visit in Edinburgh, PROFESSOR DUDLEY was pleasantly entertained by DR. THOMAS KEITH, who had just returned from a consultation with DR. HOMANS in Boston, but

unfortunately DR. KEITH did not operate during this time, although a large number of patients were waiting for him at the Royal Infirmary. His son, DR. SKENE KEITH, kindly invited PROFESSOR DUDLEY to an ovariectomy, his forty-eighth operation. Up to this time, he had only lost one or two patients. His operation presented some interesting peculiarities. He used probe-pointed scissors of a peculiar pattern, instead of the director, in going down through the deeper layers of the abdominal walls. By pressing firmly against the adhesions with a sponge, at the point of their attachment to the cyst, he literally sponged them away from the tumor. It was surprising to note the facility with which rather firm adhesions were thus broken. It is much easier to tear them from the tumor with the sponge than to tear the tumor from the adhesions. The breaking of the adhesions in this way is also much more gentle, and in the opinion of DR. KEITH, diminishes the danger of shock.

The adhesions were ligatured with fine cat-gut as fast as they were divided. In passing the ligatures a forceps, similar to the ordinary compression forceps, was used. This instrument had blades more than an inch long, of very small diameter, terminating in sharp points, so sharp that when the blades were closed they could be thrust through any soft tissue like a large needle. Grasping the ligature in the point of these blades, the tissue to be ligatured was transfixed. The ligature was then pulled through and the forceps withdrawn.

The pedicle was transfixed and ligatured, with fine silk, in the same way.

The cautery, to which much of the elder KEITH's success has been attributed, was not employed in this case, because the pedicle was very slender. The reason why the cautery, in the hands of other operators, has not proved a more per-

fect protection against hæmorrhage, becomes apparent to any one who has witnessed its application in the hands of DR. KEITE. The whole secret of his method is, first, in the powerful compression of the pedicle between the broad blades of a heavy Baker-Brown clamp; second, in the prolonged application of the red-hot cautery iron, not only to the pedicle, but, after this, has been burned to the level of the clamp, also to the clamp itself. In this way the clamp becomes so hot that the included portion of the pedicle is slowly and thoroughly cooked, so that when the instrument is removed, the end of the pedicle is thin and translucent, resembling a horny substance. Such a pedicle, in the experience of DR. KEITH, never gives trouble from oozing.

The wound was closed with fine silk sutures which had been boiled. Ten or fifteen pieces of silk were threaded at each end with very finely well tempered needles nearly three inches long, which were introduced on either side from within outward. Very small margins of peritoneum and skin were included in the sutures. DR. KEITH thought it a very common fault among operators to draw the stitches too tight in tying. The long fine needle used in closing the wound is superior. It makes a very small puncture, which never bleeds, and is so fine that it is easily pushed through by means of finger and thumb without needle forceps.

In the *American Journal of Obstetrics*, April, 1880, MARION SIMS had given a remarkable description of the Keith operation, which has exerted a powerful and beneficent influence upon the operation in America. PROFESSOR DUDLEY could add little except the gentle handling of the adhesions with the sponge, the ligature forceps and the peculiar long straight needles already mentioned.

The wonderful success without antiseptics recorded by the

great Scotch ovariologist, by DR. BANTOCK and by MR. TAIT, who have reduced the mortality almost to zero, must have great influence in fixing the value of Listerism so far as it relates to abdominal surgery. At any rate, incompetent operators can no longer venture with impunity upon these capital operations under the dangerous impression, that in some mysterious way, antiseptics will deprive a crude surgical performance of its greatest perils. Evidently it was not so much a question of Listerism as of removing the tumor with the least possible amount of operating, and in the shortest time consistent with careful attention to detail, and in the most gentle manner.

PROFESSOR DUDLEY, however, raised the pertinent question whether Listerism should be placed on trial before a court of abdominal surgeons, and whether, if found unnecessary in peritoneal surgery, it would be fair to condemn it in general. He thought that such a verdict could not be sustained by the facts, but that the antiseptic principle in surgery was destined to stand. Even the most violent opponents of antiseptics agreed that perfect cleanliness was essential. He knew of no other method by which cleanliness could be rendered so nearly absolute. Nor did the seeming ability of two or three of the most dexterous operators to do without antiseptics prove that it might not be a useful aid to others. Clearly, the man who removes a tumor with the least operating and handling of the parts will require fewer preventive measures against inflammation and sepsis. Antiseptics, therefore, might be most valuable for an inexperienced operator, and, to say the least, an additional safeguard for any one.

Some American operators were now having about as good results as could be shown in Great Britain, which seemed to indicate that our former high mortality in this American

operation had been due in reality to bad operating, and not, as many supposed, to climatic causes.

The minor gynecology of Great Britain had apparently made but little progress since the days of BENNETT and SIMPSON. The general impression prevails that on this side of the Atlantic we are going wild in the minor gynecological surgery. In response, we may now congratulate our English brethren that many of their leading gynecologists are already commencing to comprehend, to appreciate and to perform the American operations of Perineorrhaphy, Elytrorrhaphy and Trachelorrhaphy, and at the same time to lay aside in a measure the old *porte caustique*.

DISCUSSION.

DR. H. P. NEWMAN said that there were other reasons for the brilliant success of foreign laparotomists than those referred to by Dr. Dudley. Aside from the facility and expeditious manner of operating, acquired by large experience, a prime factor is the justifiable self-confidence of the operator and a responsive confidence inspired in the patient.

PROFESSOR W. W. JAGGARD thought that minor gynecological operations, as PROFESSOR DUDLEY termed them, were less frequent in the United Kingdom and the Continent than in America. PROFESSOR DUDLEY had made this general assertion, and he agreed with him. He did not, however, think the operative skill of British or Continental surgeons inferior to that of their American *confrères*. The indications for operative procedure do not exist in the United Kingdom and the Continent as in America. Laceration of the cervix and perineum are of much less frequent occurrence. The *cervix uteri* is usually effaced, and the external os is fully dilated before the application of the forceps. Manual dilatation is less frequently practiced. The bag of waters is not prematurely ruptured. Greater care is taken

with the preservation of the perineum. In a word, obstetricians are better operators, and do not require so-called gynecological assistants.

DR. E. J. DOERING said that, in 1874, he had been present at ovariectomy and other operations, performed at the Samaritan Hospital by SIR SPENCER WELLS. He was particularly impressed with the extreme care exercised in admitting spectators to the operations, each visitor being required to sign a statement that he had not made an autopsy or attended a case of contagious disease for the two or three days preceding. He desired to know whether these regulations were still in force, and also if MR. LAWSON TAIT and DR. KEITH required similar restrictions.

The PRESIDENT asked the following questions :

1. " Was any treatment given to the patients to prepare them for the operation by any of the eminent gentlemen mentioned ? "
2. " How were the patients covered during the operation, or was the whole abdomen left bare ? "
3. " How was the evacuation of the cyst managed ? "
4. " Was the patient turned upon her side to accomplish this, as DR. THOMAS sometimes does ? "

The PRESIDENT suggested that all who desired should ask questions for further light before the general discussion began.

PROFESSOR CHRISTIAN FENGER replied to the question, raised by PROFESSOR DUDLEY, that antiseptic precautions might be more important in surgery, in general, than in abdominal surgery, where it looked as though more perfect methods of operating without antisepsis gave as good results as with antisepsis, as follows :

He thought that the abdominal, or rather peritoneal cavity, in respect to the antiseptic precautions, occupies a peculiar

position in surgery. The danger from absorption of the poisonous antiseptics is far greater in the abdomen than in wounds. The ability of the peritoneum to absorb serous fluid and blood before it decomposes, to encapsulate foreign substances not capable of absorption—*ex. gr.*, rubber ligature—is perhaps somewhat greater than the ability of a wound in that direction, although it may be that there is some prejudice about this, as we have not as yet used silk ligatures extensively in general surgery.

As to the question, whether more perfect methods of operating without antisepsis would improve the results, or rather prevent inflammation and sepsis, he could say that outside of the peritoneum this question must as yet be answered in the negative.

In 1873, VOLKMAN, of Halle, introduced the Lister method of dressing and operating in his surgical clinics. In his report of the work done in 1873 (*Beiträge zur Chirurgie*, 1875), the antiseptic surgery had reduced inflammatory and septic complications following excisions, amputations, fresh penetrating articular wounds, fresh open fractures, to a minimum never before dreamt of, and all this in one year. In the broad field of surgery it is not possible that VOLKMAN or anybody else could improve the *technique* of operating, to the extent of having the results change all of a sudden in that way. No surgeon would dare, to-day, to excise, for example, a knee-joint, without antiseptic precautions in all the minute details, even if he employed all the latest improvements in the method of operating. Abdominal surgery is the only branch of surgery in which, as yet, the heavy operating has been done without antiseptic precautions.

W. W. JAGGARD, M. D., *Editor*.

2330 Indiana avenue,

CHICAGO MEDICAL SOCIETY.

Stated meeting, September 21, 1885. The PRESIDENT, C. T. PARKES, M. D., in the chair.

"Special versus General Study in Medicine" was the title of an essay by Dr. Charles F. Sinclair. The following is an abstract: During the seventeenth and eighteenth centuries there existed several schools of medicine founded upon medical investigations stimulated by the discovery of the circulation of the blood by Harvey. These schools were founded upon theories. One school explained the processes of life as due to mechanical laws; another, as due to chemical laws; still another, as due to molecular movements; and finally, schools were founded which respectively promulgated the doctrines that life was due to an ether or a spirit existing in the grosser material of the body. Thus we see that medical thought and investigation began to divide. This subdivision in thought led to separate investigations, and specialism was the result. This tendency, which is becoming more marked each day, may be called, perhaps, the distinguishing characteristic of recent medical study. The more clearly defined and generally recognized specialties to-day are surgery, diseases of the eye, diseases of the ear, diseases of women, diseases of children, diseases of the skin, diseases of the nervous system, diseases of the genito-urinary tract, including syphilis, diseases of the throat, heart and lungs, obstetrics and forensic medicine. The rapidity with which the tendency of special study is being developed is seen in the fact that five years ago one of our oldest medical schools gave special notice of only two of the special subdivisions I have mentioned. However, within three years this school has added a fourth year for the study of the branches mentioned. But it is ob-

ected that the student of a specialty should become practically conversant with the details of so-called general medicine. But it is a disastrous step for the young practitioner to try to cultivate a special practice from a general, if the old adage, "Once a general practitioner, always a general practitioner," is true. On the other hand, the specialist gains a footing more readily by confining himself to his specialty. It is further objected that the specialist is apt to forget that there are other important organs in the body beside the one to which he has given his attention. But this objection is puerile, when it is seen that the successful specialist must of necessity study the relations the different organs of the body hold to each other, and remember that any departure from the normal in one organ may be the result of disease in a more remote organ. The medical profession should look with favor upon this subdivision of medical work, because we see such vast accumulations of material in all the various departments of medicine that few would care to undertake, or have the ability, to even peruse our medical literature, much less master all the knowledge collected. In this day of rapid interchange of thought none can be found who can keep abreast of all the discoveries in the various departments of medicine. Another reason for the existence of the specialist is the fact that very few men can secure the expensive instruments necessary to be used in the treatment of the various diseases, nor are there many physicians who could skilfully use them were they so fortunate as to possess them. Many cases cannot be successfully treated without these instruments. In our city, specialties should receive further development, because as they are clearly defined and faithfully adhered to in practice, proportionately does the city rank as a medical center.

DR. F. M. WELLER opened the discussion by asking why the

subdivision of the practice of medicine into the special treatment of diseases of the various organs should not be carried further into specialties for various specific diseases? Let us have physicians whose respective specialties shall be catarrh, ague, diphtheria, etc.

DR. W. F. COLEMAN said that while he agreed with the author in the main points in his paper, he thought it should rest with each individual whether he shall confine himself to special practice or emphasize it in general practice. It is advantageous to specialists that they should confine themselves to their chosen fields. But we should not judge of the benefits to be derived from specialties by the individual success of each practitioner, but by the extent each practitioner enriched our literature by the record of his investigations. It is thus that the eye and ear specialist, the specialist in throat and lung diseases, the laryngologist and others have done most to advance medicine.

"*The Treatment of Syphilis*" was the title of a paper read by Dr. L. T. Potter. He said that the treatment of syphilis must be threefold—hygienic, tonic and specific. By the latter is meant the administration of mercurial and iodine preparations. The profession seems to be greatly divided in opinion in regard to the methods of using these remedies and the length of time they should be employed. In scanning the literature on this subject the reporter was surprised to find that those high in authority differed as to these points. The reporter advanced two propositions: first, that neither the iodine preparations alone, nor mercury alone, can always be relied upon as effective in the treatment of syphilis, but that *both* are necessary to eradicate the disease; second, that the duration of treatment must be at least two years, faithfully carried out, no matter how mild an attack. In support of his first proposition the

reporter quoted Bartholow, Ringer, Jonathan Hutchinson, Keyes, Bumstead and Taylor as saying that mercury should be given in the primary and secondary stages of syphilis, and iodide of potassium in the tertiary stage. They all agree that both must be used to effect what is called a cure. In support of his second proposition, he quotes Van Buren and Keyes Fournier, Bumstead and Taylor, as insisting upon the treatment extending over a course of two years or more. Diday says the minimum time for treatment is twenty-two months. The two-year course of treatment does not mean the continual administration of mercury or iodine, but at intervals the remedy may be discontinued for a short time, if it seems to have a debilitating effect on the patient. In the light of such unanimity of opinion of eminent authorities upon this question of duration of treatment, it is surprising that intelligent physicians will positively assure their patients that they are *cured* of syphilis at the expiration of a course of treatment lasting from four to six months!! A physician who does so is certainly criminally negligent, and is a misanthrope of the worst type. Then it becomes all to impress upon patients the importance of carrying on the treatment for at least two years.

PROFESSOR E. L. HOLMES commenced the discussion by saying he considered the paper very valuable, because the author lays so much stress upon the importance of thorough and long-continued treatment. One of the most important lessons he had ever received was to treat syphilis according to the plan the gentleman has advocated. Many years ago he had been taught this lesson by sad experience. It had been his lot to see many patients suffering from specific diseases of the eye long after they had been discharged by their physicians as cured. He could not understand how any physician can believe it possible to cure syphilis without carrying out the treat-

ment a long time. In many years' practice in this city he cannot remember of having seen but three primary syphilitic lesions, and these all occurred on some portion of the eye. He saw one man who had on the upper eyelid a sore which resembled and was treated as a burn, until its course decided it to be a chancre. The man would not tell how he obtained it, but it readily disappeared under specific treatment. A great many diseases of the eye occur thus, and the physician is unable to find out how they arise. Many years ago it was taught that iodide of potash, if given in large doses, would effect a sure and speedy cure. But Professor Holmes thought the treatment by large doses of iodide dangerous, as it ameliorates the symptoms so quickly as to cause the physician and patient to abandon the remedy too soon. In this country we do not have so good an opportunity to study syphilis as the Europeans. In Vienna and Prague, where the people live and do not pass from the observation of physicians, their statistics are more valuable and reliable than ours can be. He thought it best to give the patient all the mercury he can bear in the primary and secondary stages. Rub it in the skin and give it internally. Follow this up eighteen months or two years, and then give iodide of potassium later. Every three or four months give a course of treatment for years after. You will have no trouble impressing upon intelligent people the importance of long-continued treatment.

DR. R. TILLEY said he wished to refer to one point not touched in the paper, and that is, patients treated for syphilis are often told by their physicians of the importance of long-continued treatment, but they will not heed these warnings, and do not return. This fact will excuse the physician many times, as it is not in his power to carry out the treatment when he wishes; and thus physicians should often be relieved of the

blame of not having treated their patients long enough. He did not think any intelligent physician would advocate treatment under two years, and he believed Keyes, in his last edition, extended the time of treatment to four years. Dr. Tilley was of the opinion that we cannot do without mercury, and yet some in high places teach this doctrine. Those who try to treat syphilis without mercury are certainly responsible for later developments.

DR. J. ZEISLER thought the present treatment of syphilis is not scientific, and that there had been little advance in this direction in the last century. Cases are known in which, after seven years' treatment, symptoms of the disease returned. Take the case of Prof. Zeissl, who died last year. He was infected while opening a bubo several years ago. He certainly knew how to treat himself, and yet he died of cerebral syphilis. This does not look as though the treatment of syphilis is yet founded on a scientific basis. If the discovery of the bacillus of syphilis proves to be correct, it may prove the means of enabling us to treat syphilis scientifically.

PROFESSOR G. C. PAOLI said he is by nature a cosmopolitan, and always selects the best from the writings of all nations. A great many books have been written on this subject, among which Ricord's stand first. Ricord was a man of great talent, experience and powers of observation. He had unexcelled opportunities for study in the Paris Hospital when he was the chief physician. In regard to treatment, all agree that mercury must be administered for a long time. There are syphilitic cases in which mercury is contraindicated, namely, phthisical patients and in albuminuria, unless we believe syphilis is the cause of the albuminuria.

DR. R. TILLEY referred to one point introduced by Dr. Zeisler, who referred to Professor Zeissl as having died of cere-

bral syphilis, claiming that no one would doubt Prof. Zeissl's ability to cure syphilis. But the question is not whether Prof. Zeissl knew how to treat syphilis, but how did he treat himself? Cooper, in his book on syphilis, if he (Dr. Tilley) were not greatly mistaken, cites Prof. Zeissl as a type of those who used mercury sparingly. If that is so, and Zeissl used it only sparingly on himself, then the death of Zeissl from cerebral syphilis is a very important lesson, and bears materially on the subject under discussion.

DR. J. ZEISLER said he knew that in the case of Prof. Zeissl mercurial inunctions were made, but to what extent he was unable to say.

DR. L. T. POTTER closed the discussion by expressing himself as gratified at the amount of discussion which had been aroused; however, he was surprised at the statement that there had been little or no advancement in the treatment of syphilis. In this day of elegant pharmaceutical preparations and easy administration of mercurials and iodides, he thought there had been a great advancement, for pharmacy and chemistry have stepped in and given us preparations we did not use many years ago. Mercury should not be given when it is producing a debilitating effect.

The President, PROFESSOR C. T. PARKES, presented to the society a specimen, with the following remarks: "I hardly know whether you would call this a pathological specimen or not. But you see a mass which was removed from a uterus, and it proves to be a sponge. A short time ago I was called to see a lady who had been treated by a physician who introduced a sponge tent into the cervix uteri, and instructed the lady to allow it to remain two or three days, and then pull it out. She attempted to do so, but the string broke and the sponge was not obtained. After three weeks of suffering, with a discharge

per vaginam, I was called to see her. By digital examination I could not find any evidence of the sponge, the external os being closed so as to merely admit a probe. But I could not find any sponge by probing, so I introduced an Ellinger dilator, and soon seized the sponge with a forceps and brought it out. The symptoms present passed rapidly away, and the patient is now well. The point to be learned is, that when a physician introduces a sponge tent, he himself should remove it.

The society then adjourned.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

The ninth annual meeting of the American Dermatological Association was held at Greenwich, Conn., August 26th, 27th, and 28th, 1885. The attendance was the largest recorded in the history of the Association.

After the usual address by the President, Dr. W. A. Hardaway, of St. Louis, the first paper was read by Dr. J. E. Graham, of Canada, in which a full description was given of an unusual case of tuberculo-ulcerative syphiloderm of hereditary origin. The paper was illustrated by colored drawings of the disease, which largely affected the arm and shoulder of a girl twenty years of age.

Dr. F. B. Greenough, of Boston, then read a paper entitled "Clinical Notes on Psoriasis," being a careful collation of the records of 394 cases of the disease treated in dispensary practice, illustrating clearly the more interesting features of the disease in their clinical preponderance. In the discussion which followed, it was shown with clearness that too much stress has been laid upon the disposition of psoriasis to affect the region about the extensor faces of the extremities, the dis-

ease, in more cases than is commonly supposed, selecting other portions of the body for amplest development.

Dr. Samuel Sherwell, of New York, followed, in the afternoon session, with a paper entitled "Remarks on a Moot Point in the Etiology of Psoriasis," in which a careful collation of authorities had been made in the effort to show the views generally held as to constitutional origin of the disorder.

Two papers, one by Dr. James C. White, of Boston, and the other by Dr. James Nevins Hyde, of Chicago, were read consecutively and discussed together, in the evening session of the first day. The former was entitled "The Treatment of Lupus by Parasitocides;" the latter, "On the Relations of Lupus Vulgaris to Tuberculosis," being based upon a study of twenty consecutive cases. Both authors held to a belief in the relationship of lupus to tuberculosis, as explained by the bacilli recognized and cultivated in the two disorders. Dr. White's report of the results of treatment by local applications of the mercuric bichloride in solution and ointment, was in a high degree satisfactory.

Dr. White, on the evening previous, had also read a comprehensive description of cases of Angioma Pigmentosum et atrophicum, observed by himself, and illustrated by admirable photographs. These, with the cases previously reported by R. W. Taylor and L. A. Duhring, are the only instances of the disorder thus far reported as observed in America.

Dr. A. R. Robinson, of New York, read, on the morning of the second day, a paper entitled "On the Histology of the Vegetable Parasites," more particularly relating to the anatomical portions of the hair follicle invaded by the trichophyton. The paper was the result of the careful microscopical observations of the author, for which he has a deserved reputation.

His paper, as well as that of Dr. Heitzmann, of New York, which followed, "On the Structure of the Derma, and of the elastic tissue in it," was illustrated by microscopical demonstrations.

The paper by Dr. W. A. Hardaway, of St. Louis, on "Myoma of the Skin," was of interest as showing the pathological character of many of the tumors which from clinical symptoms might be assumed to be purely neuromatous. The paper was a valuable contribution to the study of both neuroma and myoma of the skin.

Dr. L. A. Duhring, of Philadelphia, in the afternoon, followed with a paper on the "Relation of Herpes Gestationis and certain other forms of Disease to Dermatitis Herpetiformis." The author, in this contribution, merely pushed further the work which he has been exhaustively conducting in the yet poorly-defined field of dermatitis herpetiformis, which has been during the last year illustrated by several papers from his pen.

Dr. G. H. Tilden, of Boston, followed with a paper on Mycosis Fongöide, based upon a case under his observation. The paper was an exhaustive contribution to the subject, the author taking the ground not held by the majority of those present, viz: that the disease under description was not purely sarcomatous in character.

Dr. R. B. Morison, of Baltimore, reported an unusual case of Tylosis of the hands, illustrated by a sketch of those members in a negro who was a victim of the disorder. Opinions were divided as to the nature of this malady, whether it was a variety of the "*Mal Pérforant du Pied*," or was purely a tylosis in the case of a person whose hands were excessively exposed to injurious influences in the labor of shoveling coal.

Dr. L. N. Denslow, of Minnesota, read a paper on Ure-

thral Irritation as a source of certain neuroses, with special reference to acne ; and followed this on the third day with a second short paper reporting a case of Syphilitic Aphasia and Paraplegia, followed by death, with an account of the autopsy. Both papers were of interest, the former being apparently confirmatory of the views expressed by Dr. Sherwell in his paper on a similar subject a year before.

On the morning of the third day Dr. C. Heitzmann, in his remarks on "Electrolysis and other Practical Topics," gave the signal for a full discussion of the several methods of removing hairs, port-wine marks, and small growths, by the continued electric current. The author in his paper discussed, also the treatment of freckles and, of seborrhœa of the scalp.

Dr. H. W. Stelwagon, of Philadelphia, read a paper on the employment of the Oleates in Skin Diseases, which elicited an interesting discussion. Both the author and those who heard him were in agreement as to the valuelessness of most of the oleates lauded for treatment of cutaneous maladies.

Dr. R. W. Taylor's paper on Syphilitic Reinfection was a contribution of three more cases to those previously reported in literature. They were all, from the first, observed by himself, and reported with the detail and minuteness requisite for establishing the essential fact of both a first and second syphilitic infection.

Dr. Hyde, chairman of the committee on statistics, reported 9,346 cases of cutaneous disease registered during the year by members, arranged in the tables and according to the nomenclature of the Association.

Adjourned to meet at the same place, in the same week of August of the ensuing year.

THE WESTERN SOCIETY OF PSYCHICAL RESEARCH.

This society was organized in May of the current year. It has already held several meetings, elected officers and members, and outlined its work. The president, Professor A. R. Jackson, at the meeting held on June 30th, briefly stated the objects of the society to be the investigation of the phenomena of so-called apparitions, mesmerism, mind-reading, clairvoyance, spiritualistic manifestations, etc., and, in the language of the English Society for Psychical Research, "to approach these various problems without prejudice or prepossession of any kind, and in the same spirit of exact and unimpassioned inquiry which has enabled science to solve so many problems once not less obscure nor less hotly debated."

The western society has been founded for the purpose of aiding in the work so successfully commenced by the societies in England and Boston. Five committees have been organized, as follows :

1. Committee on Thought-Transference. Rev. H. W. Thomas, Chairman.
2. Committee on Hypnotism, Clairvoyance and Somnambulism. Dr. E. J. Kuh, Chairman.
3. Committee on Apparitions and Haunted Houses. Professor Rodney Welch, Chairman.
4. Committee on Physical Phenomena. D. W. Chapman, Chairman.
5. Committee on Psychopathy — mind and faith cure, etc. Col. A. N. Waterman, Chairman.

At the last meeting the secretary reported a membership of over one hundred. The amount of valuable work done, and the scientific accuracy of the reports made by the English society, have doubtless furnished the motive for the present organization.

REPORT OF THE COMMITTEE APPOINTED TO ARRANGE FOR
THE MEETING OF THE INTERNATIONAL MEDICAL CONGRESS
IN AMERICA, IN 1887.

At the regular annual meeting of the American Medical Association, held in New Orleans, in April, 1885, the following resolutions were adopted :

1. "*Resolved*, That the Committee appointed by this Association, to arrange for the meeting of the International Medical Congress in America, in 1887, be enlarged by the addition of thirty-eight members, one from each State and Territory, the District of Columbia, the Army, Navy, and Marine Hospital Service, to be appointed by the Chairman at this meeting, and that the Committee, thus enlarged, shall proceed at once to review, alter, and amend the motions of the present Committee as it may deem best."

(This resolution was amended by the provision, "that the members of the Committee should be selected by the respective State delegations.")

2. "*Resolved*, That the Committee appointed in pursuance of a resolution adopted by this Association, April 30, 1885, to constitute an addition to the original Committee of eight previously appointed to invite and make arrangements for the meeting of the International Medical Congress, to be held in Washington, D. C., in 1887, be, and the said Committee is, hereby authorized and empowered to select a Chairman and a Secretary, and to fill all vacancies that may occur by death or inability to attend in the Committee, and to appoint the officers of the Congress."

The following is a list of the Committee enlarged in accordance with the first resolution as amended :

W. E. Anthony, M. D., Providence, R. I. ; G. Baird, M. D., Wheeling, W. Va. ; Robert Battey, M. D., Rome, Ga. ; F. W. Beard, M. D., Vincennes, Ind. ; *J. S. Billings, M. D., U. S.

*Resigned.

Army, Washington, D.C.; *J. M. Browne, M. D., U. S. Navy, Washington, D. C.; L. P. Bush, M. D., Wilmington, Del.; H. F. Campbell, M. D., Augusta, Ga.; R. Beverly Cole, M. D., San Francisco, Cal.; E. P. Cook, M. D., Mendota, Ill.; W. C. Dabney, M. D., Charlottesville, Va.; Charles Denison, M. D., Denver, Col.; W. E. Duncan, M. D., Ellendale, Dakota Ter.; J. W. Dupree, M. D., Baton Rouge, La.; Ellsworth Eliot, M. D., New York City; *G. J. Englemann, M. D., St. Louis, Mo.; N. F. Essig, M. D., Plattsburg, Mo.; *Austin Flint, M. D., LL. D., New York City; E. P. Frazer, M. D., Portland, Oregon; George F. French, M. D., Minneapolis, Minn.; A. Y. P. Garnett, M. D., Washington, D. C.; S. C. Gordon, M. D., Portland, Me.; J. W. S. Gouley, M. D., New York City; F. M. Gunnell, M. D., U. S. Navy, Washington, D. C.; John B. Hamilton, M. D., U. S. Marine Hospital Service, Washington, D. C.; *I. M. Hays, M. D., Philadelphia, Pa.; *C. Johnston, M. D., Baltimore, Md.; George A. Ketchum, M. D., Mobile, Ala.; R. A. Kinloch, M. D., Charleston, S. Ca.; D. A. Linthicum, M. D., Helena, Ark.; John S. Lynch, M. D., Baltimore, Md.; J. J. McCachran, M. D., Laramie City, Wyom. Ter.; J. W. McLaughlin, M. D., Austin, Texas; R. C. Moore, M. D., Omaha, Neb.; Robert Murray, M. D., U. S. Army, Washington, D. C.; R. Murray, M. D., Moultrie, Fla.; J. W. Parsons, M. D., Portsmouth, N. H.; William Pierson, M. D., Orange, N. J.; N. J. Pitman, M. D., Tarboro, N. Ca.; *L. A. Sayre, M. D., New York City; X. C. Scott, M. D., Cleveland, O.; *Nicholas Senn, M. D., Milwaukee, Wis.; John V. Shoemaker, M. D., Philadelphia, Pa.; F. L. Sim, M. D., Memphis, Tenn.; A. R. Smart, M. D., Hudson, Mich.; D. W. Stormont, M. D., Topeka, Kan.; J. M. Taylor, M. D., Corinth,

*Resigned.

Miss.; E. F. Upham, M. D., West Randolph, Vt.; W. H. Wathen, M. D., Louisville, Ky.; W. Watson, M. D., Dubuque, Iowa; W. C. Wile, M. D., Sandy Hook, Conn.; A. H. Wilson, M. D., Boston, Mass.

At an informal meeting of the Committee, held at New Orleans during the session of the American Medical Association, in April, 1885, Dr. R. Beverly Cole, of San Francisco, Cal., was elected temporary Chairman, and Dr. John V. Shoemaker, of Philadelphia, Pa., was elected temporary Secretary.

The Committee held its first regular meeting at Chicago, Ill., on June 24th and June 25th, 1885, for the purposes of organization and the transaction of the business committed to it by the American Medical Association.

In order to facilitate the holding of meetings in different sections of the country, the Committee deemed it advisable to select a Vice-Chairman, in addition to a Chairman and a Secretary.

The following named members were present at the meeting held in Chicago:

G. Baird, M. D., Wheeling, W. Va.; Robert Battey, M. D., Rome, Ga.; F. W. Beard, M. D., Vincennes, Ind.; *J. S. Billings, M. D., Washington, D. C.; R. Beverly Cole, M. D., San Francisco, Cal.; E. P. Cook, M. D., Mendota, Ill.; W. E. Duncan, M. D., Ellendale, Dakota Ter.; Ellsworth Eliot, M. D., New York City; N. F. Essig, M. D., Plattsburg, Mo.; G. F. French, M. D., Minneapolis, Minn.; A. Y. P. Garnett, M. D., Washington, D. C.; John B. Hamilton, M. D., Washington, D. C.; *I. M. Hays, M. D., Philadelphia, Pa.; George A. Ketchum, M. D., Mobile, Ala.; D. A. Linthicum, M. D., Helena, Ark.; John S. Lynch, M. D., Baltimore, Md.; J. W. McLaughlin, M. D., Austin, Texas; X. C. Scott, M. D., Cleveland, O.; *Nicholas Senn,

*Resigned.

M. D., Milwaukee, Wis.; John V. Shoemaker, M. D., Philadelphia, Pa.; F. L. Sim, M. D., Memphis, Tenn.; A. R. Smart, M. D., Hudson, Mich.; D. W. Stormont, M. D., Topeka, Kan.; E. F. Upham, M. D., West Randolph, N. Y.; W. Wathen, M. D., Louisville, Ky.; W. Watson, M. D., Dubuque, Iowa; A. H. Wilson, M. D., Boston, Mass.

The resignation of Dr. Austin Flint, of New York, as a member of the Committee, was presented and accepted. Dr. J. W. S. Gouley, of New York, was elected to fill the vacancy, and took his seat with the Committee. The Committee then organized, a majority of its members being present, by the election of the following officers:

Chairman, Dr. R. Beverly Cole, San Francisco, Cal.

Vice-Chairman, Dr. John S. Lynch, Baltimore, Md.

Secretary, Dr. John V. Shoemaker, Philadelphia, Pa.

After the organization of the Committee, the number of members necessary for a quorum for future meetings was fixed at fifteen.

The following preamble and resolution were adopted, to apply to future meetings of the Committee.

"WHEREAS, It is expedient that the meetings of this Committee shall represent, as far as practicable, the profession of all portions of our country,

"*Resolved*, That any member of this Committee who may be unable to attend a meeting, shall be empowered to send as his proxy for the meeting any member of the American Medical Association, in good professional standing and a resident of his State or a member of his Government Department."

In the course of the meeting in Chicago, on June 24th and 25th, 1885, a plan of organization of the Congress was adopted, certain officers of the Congress were appointed, in accordance with the instructions received from the American Medical Association, and the Committee adjourned.

The revised rules for the organization of the Congress and a revised list of officers will be presented with this report.

In August, 1885, the Chairman, the Vice-Chairman and the Secretary, after consultation and communication with members, called a meeting of the committee, to be held in New York City, September 3d, 1885, for the purposes of completing the revision of the rules and the filling of certain vacancies in the list of officers of the Congress.

The committee met in New York City, September 3d, 1885, the following named members being present :

Drs. G. Baird, Robert Battey, L. P. Bush, R. Beverly Cole, W. C. Dabney, Ellsworth Eliot, A. Y. P. Garnett, S. C. Gordon, J. W. S. Gouley, J. B. Hamilton, George A. Ketchum, R. A. Kinloch, D. A. Linthicum, John S. Lynch, R. C. Moore, William Pierson, N. J. Pitman, L. A. Sayre, X. C. Scott, John V. Shoemaker, F. L. Sim, E. F. Upham, W. H. Wathen, W. C. Wile, A. H. Wilson.

The following named members were represented by proxies.

Dr. E. P. Cook by Dr. N. S. Davis, proxy.

Dr. A. R. Smart, by Dr. William Brodie, proxy.

Dr. J. M. Taylor, by Dr. E. P. Sale, proxy.

The committee was called to order at 12 M., September 3d, 1885, by the Chairman, Dr. R. Beverly Cole.

The resignation of Dr. L. A. Sayre, of New York, as member of the committee, was received and accepted, and Dr. A. Flint, Jr., of New York, was elected to fill the vacancy, and took his seat with the committee. The resignation of Dr. Sayre was caused solely by ill health.

The following "Rules" were unanimously adopted :

RULES.

1. The Congress shall consist of members of the regular profession of medicine, who shall have inscribed their names

on the register, and shall have taken out their tickets of admission ; and of such other scientific men as the Executive committee of the Congress may see fit to admit.

2. The dues for members of the Congress shall be ten dollars each for members residing in the United States.

There shall be no dues for members residing in foreign countries.

Each member of the Congress shall be entitled to receive a copy of the "Transactions" for 1887.

3d. The Congress shall be divided as follows, into seventeen sections:

- I. General Medicine.
 - II. General Surgery.
 - III. Military and Naval Surgery.
 - IV. Obstetrics.
 - V. Gynæcology.
 - VI. Therapeutics and Materia Medica.
 - VII. Anatomy.
 - VIII. Physiology.
 - IX. Pathology.
 - X. Diseases of Children.
 - XI. Ophthalmology.
 - XII. Otology and Laryngology.
 - XIII. Dermatology and Syphilis.
 - XIV. Public and International Hygiene.
 - XV. Collective Investigation, Nomenclature, Vital Statistics, and Climatology.
 - XVI. Psochological Medicine and Diseases of the Nervous System.
 - XVII. Dental and Oral Surgery.
4. The general meetings of the Congress shall be for the transaction of business and for addresses and communications of general scientific interest.

5. Questions and topics that have been agreed upon for discussion in the sections shall be introduced by members previously designated by the titular officers of each section. Members who shall have been appointed to open discussions, shall present, in advance, statements of the conclusions which they have formed as a basis for debate.

6. Brief abstracts of papers to be read in the sections shall be sent to the secretaries of the proper sections on or before April 30, 1887. These abstracts shall be treated as confidential communications, and shall not be published before the meeting of the Congress.

Papers relating to topics not included in the list of subjects proposed by the officers of the sections may be accepted after April 30, 1887; and any member wishing to introduce a topic not on the regular lists of subjects for discussion, shall give notice of the same to the Secretary-General, at least twenty-one days before the opening of the Congress, and such notices shall be promptly transmitted by the Secretary-General to the Presidents of the proper sections. The titular officers of each section shall decide as to the acceptance of such proposed communications and the time for their presentation.

7. All formal addresses, scientific communications and papers presented, and scientific discussions held at the general meetings of the Congress, shall be promptly given in writing to the Secretary-General; and all papers presented and discussions held at the meetings of the sections shall be promptly given in writing to the Secretaries of the proper sections,

No communication shall be received which has already been published, or read before a society.

The Executive Committee, after the final adjournment of the Congress, shall direct the editing and the publication of its "Transactions," and shall have full power to publish the

papers presented and the discussions held thereon, either in full, in part, or in abstract, as, in the judgment of the committee, may be deemed best.

8. The official languages of the Congress shall be English, French and German.

In the meetings of the sections no member shall be allowed to speak for more than ten minutes, with the exceptions of the readers of papers and those who introduce subjects for discussion, who may each occupy twenty minutes.

9. The rules and programmes shall be published in English, French and German.

Each paper and address shall be printed in the "Transactions" in the language in which it was presented, and preliminary abstracts of papers and addresses also shall be printed, each in the language in which it is to be delivered.

All discussions shall be printed in English,

10. The President of the Congress, the Secretary-General, the Treasurer, the Chairman of the Finance Committee and the Presidents of the sections, shall together constitute an Executive Committee of the Congress, which committee shall direct the business of the Congress, shall authorize all expenditures for the immediate purposes of the Congress, shall supervise and audit the accounts of the Treasurer, and shall fill all vacancies in the offices of the Congress and of the sections. This Committee shall have power to add to its membership, but the total number of members shall not exceed thirty. A number equal to one-third of the members of the Committee shall constitute a quorum for the transaction of business.

11. The officers of the Congress shall be a President, Vice-Presidents, a Secretary-General, four Associate Secretaries, one of whom shall be the French Secretary, and one of whom shall be the German Secretary, a Treasurer, and the Chairman of the Finance Committee.

12. The officers of each section shall be a President, Vice-Presidents, Secretaries, and a Council.

13. The officers of the Congress and the officers of the sections shall be nominated to the Congress at the opening of its first session.

14. The Executive Committee shall, at some convenient time before the meeting of the Congress, prepare a list of foreign Vice-Presidents of the Congress and foreign Vice-Presidents of the Sections, to be nominated to the Congress at the opening of its first session.

15. There shall be a standing Committee on Finance, composed of one representative from each State and Territory, the District of Columbia, the Medical Department of the Army, the Medical Department of the Navy, and the Marine Hospital Service.

The Chairman of the Finance Committee shall report to the Executive Committee of the Congress.

Each member of the Finance Committee shall appoint a local Finance Committee for his State, Territory, District, or Government Department, consisting of one or more members from each Government Department or Congressional District.

Each local Finance Committee shall report through its Chairman to the Chairman of the Finance Committee of the Congress.

Dr. S. C. Gordon, of Maine, recalled his withdrawal from the Congress, which action was accepted by the Committee.

The following named gentlemen were elected to fill vacancies in the Committee of Arrangements: Dr. J. K. Bartlett, Wisconsin; Dr. J. H. Baxter, U. S. Army; Dr. George Goodfellow, Arizona; Dr. Henry Leffman, Pennsylvania; Dr. John Morris, Maryland; Dr. J. R. Tipton, New Mexico; Dr. Thomas J. Turner, U. S. Navy.

The following resolution was adopted:

Resolved, That the representative or representatives in this Committee from each State, Territory, or Government Department, shall organize the Financial Committees in their respective States, Territories, or Government Departments.

It was decided that no person should occupy more than one position in the organization of the Congress.

It was also decided that, in the published lists of the Officers of the Congress, the names of the Vice-Presidents and Secretaries of the Congress, and the Vice-Presidents, Secretaries, and members of Councils of the Sections, should be arranged alphabetically.

OFFICERS OF THE CONGRESS.

PRESIDENT.

Austin Flint, M. D., LL. D., New York.

VICE-PRESIDENTS.

W. O. Baldwin, M. D., Alabama; H. I. Bowditch, M. D., Massachusetts; William Brodie, M. D., Michigan; Henry F. Campbell, M. D., Georgia; W. W. Dawson, M. D., Ohio; R. Palmer Howard, M. D., Canada; E. M. Moore, M. D., New York; Tobias G. Richardson, M. D., Louisiana; Lewis A. Sayre, M. D., New York; J. M. Toner, M. D., District of Columbia; The President of the American Medical Association; The Surgeon-General of the United States Army; The Surgeon-General of the United States Navy; The Supervising Surgeon-General of the United States Marine Hospital Service.

SECRETARY-GENERAL.

Nathan S. Davis, M. D., LL. D., Chicago, Illinois.

TREASURER.

E. S. F. Arnold, M. D., M. R. C. S., New York.

CHAIRMAN OF THE FINANCE COMMITTEE.

Frederick S. Dennis, M. D., M. R. C. S., New York.

EXECUTIVE COMMITTEE OF THE CONGRESS.

GENERAL OFFICERS.

Austin Flint, M. D., LL. D., President of the Congress.

Nathan S. Davis, M. D., LL. D., Secretary-General.

E. S. F. Arnold, M. D., M. R. C. S., Treasurer.

Frederick S. Dennis, M. D., M. R. C. S., Chairman of the Finance Committee.

PRESIDENTS OF THE SECTIONS.

General Medicine.—Abram B. Arnold, M. D., Professor of Clinical Medicine, Baltimore, Md.

General Surgery.—William T. Briggs, M. D., Professor of Surgery, Nashville, Tenn.

Military and Naval Medicine and Surgery.—Henry H. Smith, M. D., formerly Professor of Surgery and Surgeon-General of Pennsylvania, Philadelphia, Pa.

Obstetrics.—DeLaskie Miller, Ph. D., M. D., Professor of Obstetrics, Chicago, Ill.

Gynæcology.—Robert Battey, M. D., Gynæcologist, Rome, Ga.

Therapeutics and Materia Medica.—F. H. Terrill, M. D., Professor of Therapeutics, San Francisco, Cal.

Anatomy.—William H. Pancoast, M. D., Professor of General, Descriptive, and Surgical Anatomy, Philadelphia, Pa.

Physiology.—John C. Dalton, M. D., Professor of Physiology, New York, N. Y.

Pathology.—E. O. Shakespeare, M. D., General Pathologist, Philadelphia, Pa.

Diseases of Children.—J. Lewis Smith, M. D., Professor of Diseases of Children, New York, N. Y.

Ophthalmology.—A. W. Calhoun, M. D., Professor of Ophthalmology and Otology, Atlanta, Ga,

Otology and Laryngology.—S. J. Jones, M. D., LL. D., Professor of Ophthalmology and Otology, Chicago, Ill.

Dermatology and Syphilis.—A. R. Robinson, M. D., Vice-President American Dermatological Society, New York, N. Y.

Public and International Hygiene.—Joseph Jones, M. D., Professor of Chemistry and Clinical Medicine, Ex-President Board of Health, New Orleans, La.

Collective Investigation, Vital Statistics and Climatology.—Henry O. Marcy, A. M., M. D., Boston, Mass.

Psychological Medicine and Nervous Diseases.—John P. Gray, M. D., LL. D., Professor of Psychological Medicine and Medical Jurisprudence, Utica, N. Y.

Dental and Oral Surgery.—Jonathan Taft, M. D., Professor of Dental and Oral Surgery, Cincinnati, O.

LOCAL COMMITTEE OF ARRANGEMENTS.

(With power to increase their number.)

A. Y. P. Garnett, M. D., Chairman, Dist. of Columbia.

The Surgeon-General U. S. Army.

The Surgeon-General U. S. Navy.

The Supervising Surgeon-General U. S. Marine Hospital Service.

J. H. Baxter, M. D., District of Columbia.

C. H. A. Kleinschmidt, M. D., District of Columbia.

N. S. Lincoln, M. D., District of Columbia.

J. M. Toner, M. D., District of Columbia.

Lists of Vice-Presidents, Secretaries and Councilmen for each Section were named by the Committee of Arrangements, but as it was not practicable to ascertain at once who would accept the places assigned them, or who of those who had

been announced in the medical press as declining to accept positions before the present rules and organization had been adopted as given above, might wish to withdraw such declination, the final adjustment of these offices was referred to the Executive Committee of the Congress, and all correspondence in relation thereto was transferred to the Secretary-General of the Congress.

On motion, the Committee of Arrangements adjourned, subject to the call of the Chairman of the Committee.

JOHN V. SHOEMAKER,
Secretary of the Committee of Arrangements

THE FIRST MEETING OF THE EXECUTIVE COMMITTEE OF THE NINTH INTERNATIONAL MEDICAL CONGRESS.

The newly-created Executive Committee, consisting of the officers of the preliminary organization of the congress, including the presidents of the sections, held its first meeting in New York on September 24th, effected its organization and assumed charge of the remaining preliminary work. *

Henry H. Smith, of Philadelphia, was elected chairman, and F. S. Dennis, of New York, Secretary *pro tem*. Subsequently Professor Dennis was elected Associate Secretary-General, and R. J. Dunglison, of Philadelphia, was elected Chairman of the Finance Committee.

The following resolution was passed:

Resolved, That this Executive Committee enters upon the management of the affairs of the Ninth International Medical Congress, with the understanding that, in accordance with Rule No. 10, its powers are not restricted except by the rules and regulations adopted Sept. 3, 1885, by the Committee of Arrangements appointed by the American Medical Associa-

tion in April, 1885; and that the actions of this Executive Committee, are final, not being subject to revision, amendment or alteration by either the Committee of Arrangements or the American Medical Association.

The Rule 10, alluded to in this resolution, is as follows :

" 10. The President of the Congress, the Secretary-General, the Treasurer, the Chairman of the Finance Committee, and the Presidents of the Sections, shall together constitute an Executive Committee of the Congress, which Committee shall direct the business of the Congress, shall authorize all expenditures for the immediate purposes of the Congress, shall supervise and audit the accounts of the Treasurer, and shall fill all vacancies in the offices of the Congress and the Sections. This Committee shall have power to add to its membership, but the total number of members shall not exceed thirty. A number equal to one-third of the members of the Committee shall constitute a quorum for the transaction of business."

After the transaction of some routine business the Executive Committee adjourned subject to the call of its Chairman.

BOOK REVIEWS.

A GUIDE TO THE DISEASES OF CHILDREN. By JAMES FREDERICK GOODHART, M. D., F. R. C. P., ETC. *Revised and edited by* LOUIS STARR, M. D. Philadelphia: P. BLAKISTON, SON & Co. Chicago: W. T. KEENER. Pp. 728.

The careful reading of this book will convince any one interested in pædiatrics that Dr. Goodhart has admirably succeeded in preparing a manual for ready reference. No one but a German specialist, or a physician of the days of Methuselah, has time to read, mark and inwardly digest such a work as Gerhard's *Handbuch der Kinderkrankheiten*. In a lesser degree a similar desire to make their efforts encyclopædic has unduly expanded all of the more recent text books on children's diseases. Dr. Goodhart has avoided this by omitting much useless history and bibliography, giving instead especial prominence to the differentiation and essential differences observed in disease in children as compared with like affections in the adult. "At first all our cases are phthisical; a ripper experience shows them to be extremely rare," is a sample of the honesty and acknowledgment of practical difficulties that pervades the entire work. In fact, it reads from beginning to end like the kindly advice of an elder to a younger practitioner. There is nothing of the "I myself have said it" in this; but, omitting all that can be fairly granted ought to be known by the general practitioner in the way of histology and semiology, the writer clearly states wherein he has found disease in childhood other than what might have been expected, either in symptoms, course or results of treatment. It is a confidential professional talk—not unlike Dr.

Jackson's "Letters to a Young Physician," now unfortunately out of print—by one who is not striving to pad out a book, but who really has something to add to our common store of knowledge from years of careful observation. It is just such a book as ought to be the outcome from every well-equipped hospital; not a mass of dreary, dry statistics, but practical, hopeful hints for the better treatment of disease by those who cannot otherwise share hospital advantages. This, if we mistake not, has been Dr. Goodhart's aim, and most excellently has he accomplished it. He has given us no beautiful theories or false hopes founded upon hypothetical methods of treatment, but instead, plain practical, helpful suggestions for the better recovery of sick children. He has evidently given a fair trial to the various methods of treatment, and approves or disapproves according to results, and not in accordance with their present popularity, a very good instance of which is the following extract concerning the early operation of tracheotomy: "Now I say that in diphtheria it is a serious operation, * * * and as a matter of fact, the operation of tracheotomy, when performed upon the diphtheric child, is frequently followed by diffuse inflammation of the cellular tissue of the neck, and a large, sloughy wound is formed, * * whilst it would be easy to show in the clearest manner, in the *post-mortem* room, that the operation itself and the presence of the tube afterwards are in one way and another fraught with danger. It is, in fact, my belief that the broncho-pneumonia and purulent bronchitis and excessive tracheitis so often seen are chargeable quite as often to the operation as to the original disease."

Dr. Starr's notes are always timely and valuable to the American reader. Mechanically, the book is in every way a credit to its makers.

M. P. HATFIELD.

A SYSTEM OF ORAL SURGERY, BEING A TREATISE ON THE DISEASES AND SURGERY OF THE MOUTH, FACE, TEETH AND ASSOCIATED PARTS. By JAMES E. GARRETSON, M. D., D. D. S., *Dean of the Philadelphia Dental College; later, Oral Surgeon to the University of Pennsylvania, etc.* Illustrated with numerous steel plates and wood-cuts. Fourth edition, thoroughly revised, with additions. 8vo, pp. 1037. Philadelphia: J. B. Lippincott & Co. 1884. Chicago: S. A. Maxwell & Co.

The fourth edition of Garretson's System of Oral Surgery is presented to the profession, revised and enlarged by the addition of several new and important chapters, among them, "Dental Therapeusis," "The Oral Fluids," "Discolored Teeth," "Replantation and Transplantation of Teeth," three chapters on "Prosthetic Dentistry," one chapter each also upon "The Nose and its Diseases," "The Diseases of the Face," "Inflammation" and "Diagnosis." Seventy-five new illustrations have also been added.

The work, as now presented, aims to cover the field of practical dentistry—operative and mechanical—as well as of that, more strictly called, oral surgery.

The first four hundred and seventy-five pages are devoted to those topics which more particularly concern the every day practice of the dentist, while the balance of the work deals with subjects which are purely surgical, such as "Wounds of the Mouth and Associated Parts," "The Antrum of Highmore and its Diseases," "Palatine Defects and their Surgical Treatment," the diseases and operations on the face, mouth, pharynx, nose, tongue, maxillæ, salivary glands, lips, cheeks, etc. The subject-matter is, in most respects, clear, concise and ably written; but it is not to be expected that, in a work so large and treating of so many subjects, it should be above criticism. The most notable defect will be found in a portion of chap. 5,

relating to the development of the dental follicle. The views maintained by the author are those of Goodsir, which are far behind our present knowledge upon the subject, and which have been demonstrated by Magitot, Köllicker, Frey, and other eminent histologists, to be incorrect. We cannot understand how such an antiquated theory could have been given place in a work which, in other respects, stands so deservedly high.

We commend it to all those interested in dentistry or oral surgery, and have no doubt it will find a large circle of readers among both surgeons and dentists; but it would meet with a larger sale if the author had divided it into separate treatises, one devoted to operative and prosthetic dentistry, and the other to the surgery of the face, mouth and associated parts.

J. S. M.

URINARY AND RENAL DERANGEMENTS AND CALCULOUS DISORDERS—HINTS ON DIAGNOSIS AND TREATMENT. By LIONEL S. BEALE, M. D. *Pp.* 356. *Philadelphia: P. Blakiston, Son & Co. Chicago: W. T. Keener.*

This work comprises much that the author has already written upon this subject, together with the more recently developed facts.

The first 68 pages are devoted to the consideration of the physiological constituents of the urine and their proportions in normal and pathological states. The clinical features accompanying the variations from the normal standard are briefly set forth, and the indications for treatment; a short statement of the action and special application of such remedies as the author has found most efficient is given.

The second part, pp. 68-209, treats of the urinary deposits, their pathological significance, and the appropriate treatment of the conditions upon which they depend.

The third part treats of substances in solution, not found in healthy urine; albumen, its significance in the various forms of kidney disease, and the nature of the various structural tissues giving rise to its presence, together with the symptoms they produce, and the points of differential diagnosis; also hints as to the measures to be taken in combating these pathological processes. Sugar, bile and alkaloids are similarly considered under the same heading.

The remainder of the book, pp. 309-356, is given to the consideration of urinary calculi and calculous disorders—the conditions under which calculi are formed, the modes of their formation, and the treatment, preventive, palliative and curative.

The book contains so much that is useful that it is to be regretted the author has not arranged an alphabetical index. The table of contents only partially supplies the deficiency.

F. S. J.

AN INTRODUCTION TO THE STUDY OF DISEASES OF THE NERVOUS SYSTEM, *being Lectures delivered in the University of Edinburg during the Ter-centenary Year.* By THOMAS GRAINGER STEWART, M. D., F. R. C. P. E., F. R. S. E., etc. Philadelphia: J. B. Lippincott & Co. Chicago: W. T. Keener.

We have in this short and practical guide to the study of nervous diseases a very valuable contribution to the literature of the subject. There are not wanting large and valuable treatises on nervous affections, but until the appearance of the present work there has been none in our language that would serve as a fitting introduction to their study. The first three lectures are devoted to the medical anatomy of the nervous system; the next three to sensory functions; the seventh and eighth to motor functions, and one each on electricity in diag-

nosis, vaso-motor, secretory and trophic functions, cerebral and mental functions, language, pathology and general treatment. The lecture on speech and its disorders is, for brevity and clearness, the best we have ever seen.

The book is well written, typographically excellent, and freely illustrated. We note with pleasure the reproduction of Charcot's illustration of an acute bed-sore and the joint-changes in ataxia. As they have been in use fully twenty years and appear in our three most recent works (Bromwell, Ross and the present one), they bid fair to outlive most of Charcot's other works.

H. N. M.

MANUAL FOR HOSPITAL NURSES AND OTHERS ENGAGED IN CARING FOR THE SICK. *By* EDWARD J. DOMVILLE, M.D. *Fifth edition, pp. 96. Philadelphia: P. Blakiston, Son & Co. Chicago: W. T. Keener.*

That a fifth edition of this little book is demanded is sufficient evidence that it has been found useful. It contains a brief outline of the nurse's duties and suggestions as to her deportment.

Section I, upon the care of ordinary cases, is intended to prepare the nurse for all the usual duties of the sick-room—such as management of temperature, ventilation, the care of the patient's person, the administration of food and medicine.

Section II, upon extraordinary cases, gives directions for procedure in accidents and emergencies, in operations, and for the care and treatment of special cases.

An appendix is devoted to the preparation of remedies and diet for the sick, a table of weights and measures, a list of medical abbreviations, and a glossary of common medical terms.

F. S. J.

OBITUARY.

The Aurora Medical Society, at a regular meeting, indicated the feeling of the society in the following expression: Again are we reminded that we are mortal. Death indeed loves a shining mark; our ranks have again been invaded by its ruthless presence, and a second time, within the space of a few weeks, we are called upon to follow to his last resting place another of our members, Mr. Pierre A. Allaire, one to whom we were wont to look for counsel; one whose mental training had been such as to give him a pre-eminent position in the ranks of his profession; one who despised shams; an honest man. Such were the qualities we found in our association with our deceased brother. While we sincerely mourn his loss, his example will ever prove an incentive to greater effort on our part to qualify ourselves for success in the profession of our choice. Our hearts go out in sorrow toward his bereaved family, and we hereby tender them our warmest sympathy.

M. M. ROBBINS, President.

C. B. SLATER, Secretary.

September 18, 1885.

NEWS ITEMS.

THE American Academy of Medicine will meet in New York City on October 28th and 29th.

THE New York State Medical Association will hold its annual session at the Murray Hill Hotel, New York City, on the 17th, 18th and 19th of October.

EXTRACTS.

THE *Medical Record* (N. Y., Sept. 19th, 1885,) contains a brief editorial entitled "A Beginning in Bacteriotherapy," in which allusion is made to the fact that certain micro-organisms act destructively upon others. An illustration is presented in a case of pulmonary tuberculosis treated by Dr. Arnaldo Cantani, of Naples, which is described as presenting the various symptoms of the disease in the advanced stage. The experiment consisted in the withdrawal of all medicines and the daily inhalation, by means of an ordinary atomizer, of a mixture of gelatine beef-broth and a pure culture of bacterium-termo. It is stated in the report that an almost immediate improvement occurred, and that in less than a month no bacilli could be found in the sputa, their place being taken by the bacterium-termo; the general condition had greatly improved, and the body-weight increased one and one-half pounds. Apart from the novelty of the experiment, the chief interest consists in results not detailed since the first of June last. We await with interest further report regarding the result of this experiment.

A NEW REMEDY FOR HICCOUGH.

Dr. O. T. Shultz, of Mount Vernon, Indiana, ("American Practitioner"), relates a case of hiccough of nine days' duration, which yielded, on the morning of the tenth day, to one drop of a one per cent. solution of nitro-glycerine, and repeated in one hour. The remedy was continued at intervals of two hours,—gradually extended. On the twelfth day permanent relief was obtained and treatment discontinued.

THE CHICAGO MEDICAL JOURNAL AND EXAMINER.

VOL. LI.

NOVEMBER, 1885.

No. 5.

ORIGINAL COMMUNICATIONS.

INTUBATION OF THE LARYNX, WITH HISTORY OF CASES. *By*
F. E. WAXHAM, M. D., *Professor of Diseases of Children,*
College of Physicians and Surgeons of Chicago.

(Read before the Chicago Medical Society, 5th October, 1885.)

At the meeting of this society, March 20th of this year, it was my privilege to present a paper on the "Treatment of Croup." Reference was made to intubation of the larynx and the operation illustrated upon the cadaver. As considerable interest was manifested in regard to this subject, as this interest is leading to practical results, and as several improvements have been made in the laryngeal tubes, I hope I may be pardoned for again calling your attention to this subject.

Intubation of the larynx, as now performed, is due entirely to the patient and long continued investigation, the boldness and ingenuity of DR. O'DWYER, of New York. In the *New York Medical Journal*, of Aug. 8th, he gives a brief and interesting history of his labor in this direction, of his first attempts and of the various changes made in the instruments.

The latest improvements consist, first, in having the tubes

made with the head larger and directed somewhat backwards and with the shoulder in the middle of the tube, not rising abruptly from the body, but consisting simply of a gradual increase in the circumference of the tube of this portion.

The enlargement of the head overcomes the danger of slipping into the trachea. The backward curve, given the head, allows the epiglottis to close more perfectly over it, and deglutition becomes easier. The shoulder or enlargement at the center of the tube allows of easier extraction, than when near the head. These instruments now seem about perfect. They are not yet, however, entirely self-retaining. I have but two suggestions to make in regard to them. First, that the tubes be made, if possible, thinner, and second, that they should be made a trifle larger.

Intubation is performed, as has already been illustrated, by having the child held firmly in a sitting posture on the lap of the nurse, with the hands at the side, while an assistant holds the head firmly and somewhat backward. The gag is introduced between the teeth, well back in the left side of the mouth, which the assistant holds it with one hand. The tube, armed with a silk bridle, well waxed, is now secured to the introducing instrument. The right hand manipulates the instrument, while the index finger of the left hand is introduced into the mouth, guiding the tube safely and quickly over the epiglottis and into the larynx. As the introducing instrument is removed, the tip of the finger presses upon the head of the tube and forces it down into the larynx. We now make sure that the tube is in proper position, which will be indicated by easier breathing, by the tube remaining stationary, and by coughing or attempting to swallow water. The bridle of silk is very apt to produce spasmodic coughing and is usually removed. The gag is now re-introduced, the forefinger of the

left hand is again introduced over the epiglottis until it touches the head of the tube, when the silk is quickly withdrawn.

This operation, to be performed quickly and successfully, requires practice upon the cadaver. I am informed, however, of a physician who, after extended practice on the cadaver, failed completely in an effort to introduce it in a case of great urgency. With this practice, however, any one who possesses the courage and skill necessary to perform tracheotomy ought to do this operation without serious difficulty.

The removal of the tube is even more difficult than its introduction, as it is almost impossible to hold the child perfectly quiet.

Dr. O'Dwyer advises the use of ether, but I have not yet found it necessary excepting in one case where the tube slipped into the trachea.

It is my pleasure to report five cases of croup treated by intubation. Of this number, one recovered, and another died six days after intubation from pneumonia, the result of unfavorable surroundings. All, with one exception, were unfavorable cases; unfavorable both in regard to age and type of disease. The first patient was two years and one month old, the second three years, the third sixteen months, the fourth, five years, and the fifth two years and seven months. The third and fifth cases were patients with constitutional diphtheria with invasion of the larynx.

I firmly believe that the results in these five cases were better than could have been accomplished by tracheotomy. Indeed, I believe that in but one case would tracheotomy have been justified. In the fifth case, for example, few would have operated upon a child two years and seven months old suffering from constitutional diphtheria. Not only this, but the surroundings positively precluded tracheotomy. The family,

crowded in two small rooms, with the child most of the time in the kitchen, its bed a rocking-chair, the cold air entering every time the door was opened, with the most careless and negligent watching and nursing, no one indeed would have thought of tracheotomy under the circumstances; and yet tubing of the larynx prolonged life six days, until the constitutional symptoms had subsided, until the diphtheritic membrane had disappeared from the tonsils and uvula, until the temperature had become normal, and until the child was apparently out of danger. Intubation proved its superiority over tracheotomy in this case. It accomplished all, and more than could have been expected, and death was too plainly the result of unfavorable surroundings.

Speaking from this limited experience, I would advise any one contemplating this operation, first to practice upon the cadaver until he becomes expert in the use of the instruments; second, to possess two sets of tubes, so that if any accident occurs the patient's life may not be sacrificed; third, to always introduce the largest sized tube that can be used.

My first case was reported to this SOCIETY, in detail, at the meeting of April 20th. The patient died thirty hours after intubation.

CASE II. April 23rd. I was called to attend Annie M., aged 3 years, and found her in the last stages of suffocation from pseudo-membranous laryngitis. At 10 A. M. I tubed the larynx without difficulty and with immediate relief to the urgent symptoms.

12 M., Resp. 28, pulse 120, temp. $101\frac{1}{2}^{\circ}$ F.

2 P. M., " 28, " 120, " 101° F. Sleeping quietly.

5 P. M., resp. 28, pulse 130, temp. $99\frac{1}{2}^{\circ}$ F. Coughing considerably. Loose mucous râles. Treatment consisted of

bichloride of mercury, one twenty-fourth grain every hour, and mustard draughts applied every two or three hours to the chest, and oleate of mercury applied externally about the throat and chest, stimulants,—and so forth

9 P. M., pulse 125, respiration 40, temperature 100° F. Bowels moved four times. Mercury omitted.

April 24th, 1 A. M., pulse 130, respiration 52, temperature 100° F. Restless. Bowels moved three times. Opium given and mercury continued.

9 A. M., pulse 130, respiration 52, and of bad character. Removed considerable mucus from the throat, with the finger, causing some relief.

12 M., pulse 130, respiration 48, temperature 99° F. Bowels moved twice. Mercury again discontinued. The tube about this time slipped into the trachea. This accident was indicated by the hoarse voice and by the fact that fluids no longer provoked coughing. Respiration somewhat but not greatly embarrassed by this occurrence. Made an attempt to remove the tube but could not reach it.

6 P. M. With the assistance of PROFESSOR STEELE, ether was given the child and the tube was removed at the first attempt. It was found in the trachea, just below the vocal cords. Respiration was even more embarrassed after the removal of the tube, but the parents objected to its re-introduction and the child died two hours later, thirty-six hours after intubation.

CASE III. Through the courtesy of PROFESSOR HATFIELD, I was called to see a little patient, sixteen months old, in a dying condition, from diphtheritic laryngitis. With the assistance of PROFESSORS HATFIELD, CASSELBERRY and DR. STARKEY, I tubed the larynx with great difficulty. Several attempts were necessary, and it seemed almost impossible to get into

the trachea on account of its small size. This case proves the necessity of a still smaller tube than we yet possess, for the tubing of infants under two years. The relief from the urgent and distressing dyspnœa was prompt and complete. In twenty-four hours, however, there was an accumulation of mucus and softened membrane below the tube, that seemed to threaten the infant's life. The tube was removed and large quantities of mucus removed with the finger. The child now seemed to breathe easier, but in an hour urgent dyspnœa returned. Another attempt was made to introduce the tube, but it was not crowded down into the trachea far enough, and was soon rejected. As the child was unconscious, and as it was evident that we were only temporizing, no further attempt was made, and the child died an hour later, about twenty-six hours after intubation.

CASE IV. I was called in the evening of September 15th, to perform tracheotomy upon Dora K., a little girl five years old, of delicate constitution, a patient of DR. BEHREND, from whom I obtained the following history. The child had been sick about one week, but had not manifested alarming symptoms until two days previously, when he was summoned, since which time the symptoms of membranous croup were well marked and treatment seemed to have no effect upon its progress. At this time the symptoms were urgent. The voice whispering, the cough hoarse and nearly suppressed, a loud stridor heard on every inspiration, and a deep depression at the base of the thorax with every inspiration. The dyspnœa was indeed distressing to witness, and it was our firm belief that the child could not live long without surgical interference. As the parents were reluctant to have tracheotomy performed, we decided to tube the larynx,—to which they readily consented,—and to perform tracheotomy later if necessary. The

father held the child firmly in his arms with the head thrown somewhat backward, and with the assistance of DR. BEHREND the laryngeal tube was introduced quickly and easily, the operation not requiring over twenty seconds. Severe coughing was excited, and a large quantity of thick, tenacious mucus, tinged with blood, was thrown out through the tube. The breathing at once became easy and natural, although every few minutes a severe spasm of coughing occurred which seemed to be caused by the silk which secured the tube. This was removed, leaving the tube in the larynx, to the great astonishment of the parents, who believed we would never be able to remove it. The child now took bread and milk with relish and without difficulty and was left quietly sleeping.

September 16th, 9 A. M., pulse 110, respiration 24, temperature 102° F. Respiration easy, although the tube would occasionally fill with mucus; however, when urged, she would cough with considerable force, expelling thick mucus, when the respiration would again become noiseless. 9 P. M., pulse 114, respiration 28, temperature 101° F. September 17th, at 7 A. M., during a severe attack of vomiting and coughing, the tube was expelled after being in position about thirty-six hours. The respiration without the tube was now comparatively easy—28 per minute, pulse 120, temperature normal. The little patient was watched very closely, but the tube was not re-introduced. September 18th, 9 A. M., pulse 104, respiration 24, temperature normal. Voice still hoarse, respiration somewhat embarrassed, but no dyspnoea. Slept well during the night and expectorated considerable mucus and softened membrane. She seemed playful and complained of no soreness of the throat. The little patient passed most of the day comfortably, but, towards evening, the voice became more hoarse and croupy, and respiration more embarrassed. About 10 P. M., I was sum-

moned in great haste, and found the child again in a critical condition. Respiration was very difficult; again there was the deep sinking in of the tissues at the base of the thorax with every inspiration, pulse 120, and respiration 28 per minute. With the assistance of DR. BEHREND, the tube was quickly re-introduced, not requiring this time over fifteen seconds. Again violent spasmodic coughing was excited and a large quantity of thick, bloody mucus expelled. Spasmodic coughing continued at intervals of a few minutes until the silk securing the tube was removed, when the respiration again became easy and tranquil and the little one was left sleeping.

Sept. 19th, 9 A. M., pulse 100, resp. 24, temp. normal. Slept quietly all night, is playful, no irritation from the tube, and taking nourishment without difficulty. 8 P. M., pulse 120, resp. 24, temp. normal. At 10, P. M., the tube was rejected during a violent attack of coughing and vomiting. Was immediately summoned and found the respiration stertorous, a loud stridor with every respiration, cough husky, and again the deep sinking in of the tissues. A larger tube than had been previously used was now quickly introduced; again violent spasmodic coughing occurred, and large quantities of thick mucus expelled. The silk bridle was removed from the tube, and the result of this simple operation was as wonderful as it was satisfactory. The respiration became noiseless. The loud stridor disappeared, and all the alarming symptoms subsided as by magic. The little patient was again left sleeping quietly.

Sept. 20, 9:30 A. M., pulse 120, resp. 18, temp. normal. Slept well during the night and was bright and playful.

Sept. 21st, pulse 100, resp. 20, and noiseless. The little patient sitting up in the bed, happy with its playthings.

Sept 22d, pulse 120, resp. 20, temp. normal. Only awake twice during the whole night. Considerable thick, ropy mucus

expectorated during the morning. As one week had now elapsed since intubation was first performed, during which time the tube had been in the larynx five days, we now thought best to remove it. With the assistance of DR. BEHREND and DR. H. T. BYFORD, an attempt was made to do so, but violent coughing occurred, during which the tube was rejected. Respiration was now carried on comfortably and the tube was not re-introduced.

Sept. 23d, the little patient entirely comfortable, pulse 120, resp. normal, temp. normal. The voice clear and natural, and convalescence seemed assured.

Sept. 27th, child seemed well, but not yet allowed to leave the bed.

Oct. 1st, child about the house and entirely out of danger.

CASE V. Sept. 24th, I was called to see Ida S., two years and seven months old, a patient of DR. RICHARDSON'S, who has kindly furnished me the notes for the following history: The parents first noticed that the child had taken cold on the evening of the 21st. There was a slight cough and the child was feverish and restless. The following day, she complained of sore throat, but took all her food as usual. On the afternoon of the 24th, DR. RICHARDSON was called and found great vascular excitement and much difficulty of breathing. The voice was whispering and the cough stifled, pulse 140, resp. 40, temp. 103°F. On inspecting the mouth, he found diphtheritic deposit on the uvula and velum. He ordered emetic of sulphate of zinc, and, after emesis, a combination of tr. ferri chlor., hydrag. bichlor. and sodii chlorat, every two hours, and trypsin, applied with a brush; at the same time, the steam atomizer with lime water for fifteen minutes every hour.

Shortly after 8 P. M. I saw the little patient, with DR. RICH-

ARDSON, and proposed intubation as the only means of saving her life.

At 10 P. M. we tubed the larynx without difficulty. Immediately after the operation we witnessed the most happy result. The breathing became tranquil and the child fell into a comfortable sleep.

Sept. 25th, the child seemed quite bright and had slept through most of the night; pulse 95, resp. 25, temp. 100 2-5°F. Nourishment and stimulants had been regularly given.

26th, the child appeared not quite so well. Temp. 101°F., pulse 130, resp. 36. There was less false membrane to be seen on the velum and uvula, but there seemed to be some accumulation of mucus and softened membrane in the tube. We thought best to remove the tube, cleanse it, and then re-introduce it if necessary. It was removed with the extracting instruments at the second attempt and without ether. As the child breathed with comparative comfort, we concluded to leave out the tube for a few hours and to crowd stimulants and nourishment.

The tube had been removed at about 8:30 in the evening. We were both called in great haste at 4 A. M. The respiratory efforts were violent, consciousness was impaired, and the child seemed about to suffocate. The tube was immediately re-introduced, and at once the child was relieved and continued comfortable. The little patient for the next two or three days gave every evidence of rapid convalescence, breathing quietly and naturally and taking an abundance of nourishment.

On the morning of the 29th, we found the child again breathing badly and learned that she coughed and vomited in the night. We thought best to remove the tube and made two or three unsuccessful attempts. The tube could not be reached; neither could it be detected with the finger or the

extracting instruments, even when passed down below the vocal cords. We began searching about the bedding and clothing of the child and finally discovered it. This accident illustrates the negligence and carelessness, with which we had to contend. The parents were probably asleep when it occurred. If the child had been carefully nursed, this accident could not have occurred without being noticed. The tube was cleansed and re-introduced, giving immediate and great relief. The diphtheritic membrane had now disappeared from the tonsils and uvula.

Sept. 30th, in the absence of DR. RICHARDSON, I was called to see the little patient at 3 A. M., and found marked symptoms of pneumonia. The child was hot and feverish, pulse very rapid, breathing free and perfectly easy, but eighty respirations to the minute. Warm flax-seed poultices were applied to the chest and back, and covered with oiled silk. The little patient died at 9 A. M., six days after intubation.

Shortly after death a post mortem was obtained. Upon removing the trachea and larynx, the tube was found in position and unobstructed. There was slight swelling at the base of the epiglottis, mucous membrane of the larynx clear and not greatly thickened. Some false membrane was found in the trachea, but very loosely attached to the mucous membrane. Complete hepatization was observed of the upper lobe of left lung, while the lower lobe of both lungs were greatly congested and more or less hepatized. The small ramifications of the bronchi were filled with opaque mucus.

It is with pleasure that I report intubation of the larynx a success. It is an equal pleasure to know that this advance, this great achievement, has been the result of patient labor, the skill and courage of an American physician. I predict

that at no distant day tracheotomy will in a great measure be superseded by this simple, safe and bloodless operation.

3449 Indiana Ave.

REPORT OF A CASE OF LAPAROTOMY FOR GUN-SHOT WOUND OF
THE SMALL INTESTINE AND MESENTERY. *By* D. A. V. PARK,
M. D., CHICAGO.

[Read before the Chicago Medical Society, 5th October, 1885.]

The case I have to present is that of M. S., a young butcher boy, sixteen years old, slight in stature, and of under size; having the appearance of a lad fourteen years of age, rather than of sixteen years. His health for the past two years has been good, previous to that, quite delicate, and to such a degree, that he could not run and play with his young companions.

Sept. 1st, 1885, 3:30 P. M., while picking apples in an orchard, was fired upon by the manager and wounded in the abdomen. The boy threw up his hands and cried out to a bevy of his young companions, saying, "Boys, I am shot!" The manager was standing forty-five feet away; — the size of pistol ball, 22 calibre; there was profuse hæmorrhage from the wound externally, while the boy was standing; as soon as he was persuaded to lie upon the ground all external hæmorrhage ceased. While at Eighty-ninth street, a physician saw the boy and examined the wound with a probe; he could not pass the probe into the abdominal cavity, and said the boy's chances for recovery were good. The boy was removed from Eighty-ninth street to his home, the corner of Thirty-first and Wallace streets, a distance of something more than seven miles. A farmer's half-spring, light wagon was used as an ambulance; reached home 7:30 P. M. I saw the boy at eight o'clock P. M.

Upon a careful examination, I observed the following symptoms, viz: voice feeble, but could converse audibly and in a coherent and intelligent manner; face and lips colorless; extremities cold (shock slight); temperature 99° F., pulse 100, respiration 24, vomiting continuously, thirst great. Examination of abdomen by immediate percussion, the following physical conditions were noticed: marked tenderness over entire abdomen, abdomen tympanitic and walls rigid. Pistol ball entered abdominal wall at a point mid-way between symphysis pubis and umbilicus, and two inches to the left of the median line. Probed wound, a fine, flexible silver probe being used; could trace the course of the ball through skin, adipose and muscular tissue, to peritoneum, and thence downward one inch; could not trace ball through peritoneum into abdominal cavity. Dressed wound with iodoform and carbolized cotton gauze; as light a dressing as possible; gave morphia hypodermically, one-fourth grain; directed nurse how to apply cold applications to abdomen, and to give morphia, in powders containing one-fourth grain each, every three or four hours, if required.

11 o'clock P. M. Patient slept soundly for two hours. Extremities warm; but little pain; no vomiting; great thirst; nurse gave water with teaspoon; gave morphia, one-fourth grain.

3 o'clock P. M. Patient rested well for four hours. Awoke; got out of bed; walked out into sitting-room; helped himself to a glass of cold water, voided urine, not without great pain and considerable difficulty; character of urine, normal; nurse gave morphia; one-fourth grain.

5 o'clock A. M. Patient rested for two hours, awoke, wanted to know what time it was, and asked if he could not dress himself and go to work, this being the usual hour for going

to work ; drank more water and was about to dress himself, when attacked with a severe and protracted fit of vomiting ; complained of severe pain in abdomen and limbs.

8 o'clock A. M. Patient more restless, more pain and vomiting ; temperature 100° F., pulse 125, respiration 24 ; gave morphia hypodermically, one-fourth grain ; thirst great.

10 o'clock A. M. Patient resting quietly ; vomiting ceased ; temperature, pulse and respiration same as at eight o'clock ; no pain.

Dr. D. A. K. STEELE saw patient with me, made a careful examination, verified my diagnosis, and we decided to operate at once. To do laparotomy in a filthy room of small dimensions, with two typhoid patients in rooms adjoining, and a father on a protracted debauch, making both day and night hideous with his drunken revelry, were anything but pleasing inducements to the surgeons contemplating an operation of such magnitude. After due consideration, we decided to remove my patient to the Michael Reese Hospital. By assuring him that his chances for recovery would be far better at the hospital than at his home, by impressing the importance of this fact upon the minds of a brother and sister, they gave their consent to the removal.

12 o'clock M. Patient resting quietly ; temperature 100° F., pulse 125-30, respiration 24 ; conscious. Removed patient on a stretcher in a patrol wagon to hospital, being protected from the scorching sun by an umbrella.

1 o'clock P. M. Patient arrived at hospital nearly exhausted. Temperature 100° F., pulse 130, weak and intermitting, respiration 30 ; abdomen tympanitic ; tympanitic resonance extending on left side as high as hypochondriac region, and this to such a degree that no characteristic liver dullness could be obtained, and we believed that extravasation of blood into abdominal

cavity had taken place to such an extent that this organ was crowded upward to a marked degree. We are taught by no less authority than the late PROFESSOR GROSS that no surgical operation of any magnitude should ever be undertaken without due consideration and careful preparation; remembering this, the physicians and surgeons of hospital staff who were present, Dr. Steele and myself, repaired to a room and counseled together as to the advisability and the practicability of operating, twenty-two hours having elapsed since injury occurred.

We concluded to operate, and at once.

Patient was placed on operating table; abdomen shaved and washed with a 2 per cent. carbolyzed solution; legs wrapped from toes to hips with batting, made fast with a roller bandage; patient anæsthetized; ether from a common towel was the agent exhibited. Patient catheterized, and one-half pint of normal urine obtained.

1:30 P. M. Operation: An incision four inches long was made two inches to the left and on a line with the linea alba and directly over seat of wound, direction of wound followed as the incisions were made through skin, adipose and muscular tissue to peritoneum, care taken to secure bleeding vessels as we divided each tissue; could not find where the ball passed through peritoneum or discover wound thereof. The thin tendinous layer of subperitoneal fascia was picked up with tissue forceps, lifted up and clipped with scissors and slit up on a director; as peritoneum was raised and clipped in the same manner, decomposed blood rushed through opening thus made with great force, blood and blood clots which quickly formed were removed with sponges, intestine drawn out of cavity and examined for wound. First wound found was an abrasion. Ball had carried away peritoneal and muscular coats; did not penetrate mucous coat.

But little hæmorrhage; wound closed up by the interrupted catgut suture. Second wound, one-half inch in diameter, opened directly into the intestinal cavity, thence through mesentery near its junction with intestine. A small mesenteric artery was found divided and from which hæmorrhage was taking place. Artery was tied; all hæmorrhage ceased; wound in intestine closed by the interrupted suture. "The fine catgut sutures were introduced about one-third of an inch from the divided edges, made to enclose the peritoneal and muscular coats and brought out just free of the edge on one side, and were then re-introduced close to the edge and made to enclose the same amount and kind of tissue on the other side; great care taken to include muscular coat and not to allow the needle to pass into the intestinal cavity; edges of the mucous membrane were turned in and the sutures tightened, thus two broad surfaces of peritoneum were brought together." We could not detect any further injury. Abdominal cavity was cleansed thoroughly with a 1 per cent. solution of carbolyzed water, intestines cleansed with a solution of same strength and returned to cavity, being carefully examined as they were being returned. Intestines were protected and kept warm with large muslin cloths wrung out of warm water, during their removal from cavity. The intestines were normally distended.

Abdominal incision was closed by two sets of sutures, the peritoneal surfaces approximated and closed by the continuous suture; skin, adipose and muscular walls closed by interrupted suture and adhesive strips applied. Cotton gauze and roller bandage applied; dressing made as light as possible. At close of operation patient was assigned to ward B, bed 37, enveloped in heavy woolen blankets and bottles of hot water applied to feet, legs and trunk of the body.

4 o'clock P. M. Temperature 100° F., pulse 160, soft and

rapid, could be counted with difficulty, respiration 47; quite thirsty; gave an enema of brandy and water. Patient soon began to perspire freely, and after an hour one of the blankets was removed.

5:30. Temperature $105^{\circ}.5$ F., pulse 140, respiration 40. Patient got out of bed on his hands and knees on to the floor; after this he was tied in bed; pulse improved in strength, and at this time pulse was quite strong and regular, and the boy's chances appeared improved.

6 o'clock. Another enema of brandy and water administered.

At 6:30 commenced giving a teaspoonful or two of a mixture composed of equal parts of milk and lime water every half hour.

7 o'clock. Pulse had less force, was more rapid and irregular; two hypodermics of brandy given, with a somewhat favorable effect on the pulse. Temperature 101° F., pulse 150, respiration 44.

8 o'clock P. M. A third enema of brandy and water given; pulse still rapid and weak. At 8:30, 9 to 9:30 pulse continued rapid, weak and irregular, in spite of several hypodermics of brandy and ammonia administered at the corresponding hours. Cardiac impulse strong and angry.

10 o'clock P. M. Enema of brandy and milk (1 to 4) given; boy still delirious and attempted to release himself; skin no longer moist.

10:30 P. M. Notwithstanding his restraint, patient got a glass half full of water from his stand and drank it, causing profuse vomiting of the liquid contents of the stomach and some bile; urinated in bed. Bedding changed and more bottles of hot water added and continued all night. Milk and lime water advised to be discontinued.

11 P. M. Pulse continues about the same, weak and rapid; appearance of countenance anxious, restless, otherwise bright.

12 M. Enema of brandy and milk. Difficult to count the pulse.

12:30 Enema of brandy and milk.

2 A. M. Vomited again.

2:30 Enema of brandy and milk.

3:30. Vomited a third time. Involuntary defecation.

5 A. M. Legs and feet getting cold. Hands and face cold and covered with a clammy perspiration; breathing hurried; pulse exceedingly rapid; more bottles of hot water advised and hypodermics of brandy administered; hands become colder; muscles of eyes paralyzed; breathing becomes more labored. Radial pulse imperceptible; respiration sighing and infrequent; dropping of the chin, and at 5:15 A. M. patient died.

Phenomena observed during operation were as follows, viz.: a large quantity of blood in abdominal cavity. The rapidity with which it became coagulated when atmospheric air was admitted into abdominal cavity. The hæmorrhage from small vessels and contusions ceased almost instantly on exposure to air. Extravasation of intestinal contents so little that it could not be detected. Intestines empty or free from usual contents. Under the influence of the anæsthetic, pulse grew strong and regular; this continued until operation was nearly finished when pulse grew rapid and weak, and to such a degree that hypodermic injections of brandy were given often.

12:30 P. M. A post mortem examination revealed commencing peritonitis, intestines being agglutinated together, and this appeared to be quite general through entire mass of small intestines; a quantity of extravasated blood and a few blood clots were found in the upper part of left lumbar and lower half of left hypogastric regions; at the seat of wound in ileum, where the periton-

cal surfaces were drawn together with the interrupted ligatures, little bands of exudate had passed from side to side, and in one place to such an extent as to cover the knot in the ligature, thus showing that the work of repair had advanced to a marked degree; a contused wound of rectum was found near its junction with sigmoid flexure; the ball striking this point was evidently deflected downward and outward, as it was found imbedded in muscular tissue just beneath and posterior to Poupart's ligament, and but an inch or two from the point at which the boy located the position of ball, while being examined; his remark was like this: "I felt the ball stop right there, just at that point," indicating the place by the finger.

In this report, I have tried to outline as briefly as possible the points of interest from the time the boy received the wound to the autopsy, interesting in a surgical, also of great interest in a diagnostic point of view; to the surgeon surgical interference was imperative; it would be difficult to conceive of a more favorable subject: a young boy just developing into manhood, with great tenacity for life, and who had not partaken of food for ten hours previous to receiving wound, thus explaining the entire absence of extravasation of intestinal contents into abdominal cavity, this being so slight that it could not be detected. The wound to intestines was not great, the small size of blood vessel injured, the ball imbedded in muscular tissue where it would become encysted: thus summing up the amount and kind of injury to abdominal contents, I am sanguine in the belief, had it been possible to have done laparotomy immediately, with all necessary antiseptic precaution, that our earnest labor would have been crowned with the rich honors and reward that await the conscientious, skillful surgeon in this comparatively new field of surgical science.

This case corroborates the statement so often made by em-

inent surgeons, that no reliable knowledge as to direction or course of a bullet can be obtained from position of a wound of entrance or of exit, if one there be. I recall a number of cases that are also illustrative of this fact, two of which I will note,—the first coming under my observation last January; the second occurred during the war of the rebellion. J. E., 50 years old, saloon-keeper, received shot from a Smith & Wesson revolver, 32 calibre; distance not over six feet. Bullet entered the left shoulder two inches above axilla, passing through deltoid muscle. The shock from wound was great, the man falling heavily to the floor, extremities paralyzed. Examined the man; saw wound in shoulder; could find no wound of exit. Passed hand gently along the back and found what I believed to be the bullet, two inches to the right of spinal column and on a line with spinous process of tenth dorsal vertebra. Made incision through skin and adipose tissue and removed bullet. Patient survived his wound but twenty-two hours. Post mortem: found that bullet passed directly upward, striking clavicle at the point of deltoid attachment; deflected downward and backward, passing through upper and anterior portion of superior lobe of lung; thence downward through posterior and lower portion of inferior lobe of left lung, passing directly through the body of the tenth dorsal vertebra and two inches to the right thereof, being the point where found.

W. P., Company I, 68th Ohio Volunteer Infantry, at the battle of Fort Craig, was hit by a minie ball, it striking the clasp on his belt; deflected from this, passed through leather belt, clothing, and just beneath the skin, near the median line, encircled one-half of the body, point of exit being at spinous process of dorsal vertebra. The shock was so great that the soldier did not recover consciousness for some time. He was left upon the field by the surgeon to die; being removed to

hospital the following day, it was discovered that bullet had not penetrated abdominal cavity. It is needless to say that the soldier made a rapid and easy recovery.

From the rich experience derived from this case of laparotomy, I should favor making an "extensive incision, freely exposing the abdominal contents, as well as cavity, in order that all the viscera might be thoroughly and carefully exposed, and every wound brought within reach."

In a masterly paper by our honored President, entitled "Gun-shot Wounds of the Small Intestines," and read by him at the meeting of the American Medical Association, 1884, he wrote these lines:

"A period of one hundred years and more has rolled away since Dr. Heister published his belief and reported recoveries, to the time when Dr. Sims expresses his convictions—over a century of doubts, timidity, uncertainty and gloomy misgivings, lightened only occasionally by some bold and resolute assertions. The future asks for action, and it is not unreasonable to assert that careful trials will accomplish successful results."

"Avoiding any spirit of dictation, it seems proper to tabulate the following conclusions as an outgrowth of the experiments:

"1st. Hæmorrhage following gun-shot wounds of the abdomen and the intestines is very often so severe that it cannot be safely controlled without abdominal section; it is always sufficient in amount to endanger life by secondary septic decomposition, which cannot be avoided in any other way than by the same treatment.

"2d. Extravasations of the contents of the bowel after shot injuries thereof are as certain as the existence of the wound.

"3d. No reliable inference as to the course of a bullet can

be made from the position of the wounds of entrance and exit.

"4th. The wounds of entrance and exit of the bullet should not be disturbed in any manner, except to control bleeding or to remove foreign bodies when present. They need only to be covered by the general antiseptic dressing applied to the abdomen.

"5th. Several perforations of the intestines close together require a single resection, including all the openings. Wounds destroying the mesenteric surface of the bowel always require resection.

"6th. The best means of uniting the wounded intestine after resection is by the use of fine silk thread, after Lembert's method. It must include at least one-third of an inch of bowel tissue, passing through only the peritoneal and muscular coats, never including the mucous coat. The everted mucous membrane must be carefully inverted, and needs no other treatment.

"7. Wounds of the stomach, small perforations and abrasions of the intestine, can be safely trusted to the continued catgut suture.

"8th. Every bleeding point must be ligated or cauterized, and especial care devoted to securing an absolutely clean cavity.

"9th. The best method of treating the stumps of divided mesentery is to save the mesenteric surface of the bowel as above indicated.

"10th. Primary abdominal section in the mid-line gives the best command over the damage done, and furnishes the most feasible opening through which the proper surgical treatment of such damage can be instituted. Further, its adoption adds but little, if anything, to the peril of the injury.

"11th. Is not the moral effect of the assurance to the patient that he will be placed in a condition likely to lead to his recovery, a good substitute for the mental depression accompanying the general and popular conviction that these wounds mean certain death?"

Again, would it not be eminently practical to make an exploratory incision, in order to verify diagnosis, and to enlarge this incision to a complete abdominal section, for no less heroic procedure will accomplish successful results? The importance of complete abdominal section is apparent when it is remembered that the autopsy in this case revealed a large quantity of extravasated blood and a few blood-clots within the abdominal cavity.

From a scholarly paper by Professor Norman Bridge, entitled "The New Science of Medicine," I quote the following:

"The expression abdominal surgery has a meaning that is entirely modern. To have learned that the abdominal cavity may be opened with comparative safety, and to have done ovariectomy thousands of times, as well as other formidable operations upon the abdomen, with a large majority of successful results, would appear to be glory enough for a century. But the splendor of the achievements cannot be appreciated till we attempt to compute the saving of life in years."

In conclusion, I desire to publicly announce my earnest and sincere thanks to the following gentlemen, who so kindly assisted me in my vain effort to alleviate the suffering and to save the life of a fellow being, viz: Dr. Henry Banga, Dr. Edward Kuh, Dr. R. G. Collins, Dr. L. E. Frankenthal, of the Michael Reese Hospital; to Professor D. A. K. Steele for earnest interest taken and skillful assistance rendered.

COUNTY PROVISION FOR THE INSANE.

By JAMES G. KIERNAN, M. D., *Chicago.*

(Read before the Chicago Medical Society, 19th October. 1885.)

Dr. Chas. H. Hughes says in a recent contribution to the subject of State provision for the insane: "We live in an age when every uttered sentiment of charity toward the insane is applauded to its remotest echo; an age in which the chains and locks and bars and dismal dungeon cells and flagellations and manifold tortures of the less humane and less enlightened past are justly abhorrent; an age which measures its magnificent philanthropy by munificent millions, bestowed without stint upon monumental mansions for the indwelling of the most pitiable and afflicted of the children of men, safe from the pitiless storms of adverse environment without, which are so harshly violent to the morbidly sensitive and unstable insane mind; an age in which he who strikes a needless shackle from human form or heart, or removes a cause of human torture, psychical or physical, is regarded as a greater moral hero than he who, by storm or strategy of war, taketh a resisting fortress; an age when the Chiarugi's and Pinel's, the Conally's and Tuke's of not remotely past history, and the Florence Nightingale's and Dorothea Dix's of our own time, are enshrined in the hearts of a philanthropic world with greater than monumental memory."

Bright as is the picture here portrayed, its bright tints are more than equaled by the shadows which come into bold relief, when the problem which is to be discussed to-night is studied. The insane in the majority of county institutions continue in a condition only paralleled by the condition of the insane in hospitals before the days of Pinel and Chiarugi. This may seem an extremely invidious declaration to make, but its truth

is demonstrable by the perusal of the official documents of most of the states. In Illinois, for example, a State second to none in its humanitarian aims, which takes a prominent rank when provision for the insane is mentioned, the State Board of Charities writes as follows :

“ The objection to the care of the insane by counties is that county boards will not ordinarily furnish, upon the county farm or even in county lunatic asylums, the necessary attendance and medical care. * * * It is not at all an uncommon occurrence for a county board to let the care of the paupers on the county farm to the lowest bidder. Even where an alms-housekeeper is selected on account of his supposed qualification for the position, because he is an efficient farmer and a kind-hearted man and his wife is a stirring housekeeper, it does not follow that either he or his wife have any special qualifications for the care of insane patients. The presence of such patients on the farm is felt by them to be a perpetual annoyance and peril, and they rid themselves of the bother of it in the easiest possible way by shutting up every lunatic, male or female, who gives them any trouble, in a separate room, and leaving him there without recreation, companionship, or employment. He is fed through a hole in the door. Sometimes he has a bed and sometimes he sleeps on straw ; sometimes the room he sleeps in is warmed in winter, sometimes not. * * * He strips himself of clothing ; daubs the wall with filth ; for amusement he resorts to the vilest practices, and thus he vegetates until he rots. This, of course, is a description of what occurs in extreme cases, but quite often. * * * The condition of the insane in these establishments is deplorable. Kindly treated by some keepers, by others they are regarded and treated as if they were animals, not men—indeed, not so well as animals capable of earning money for their owners

They are neglected, abused, confined with chains, locked up, left in nakedness and filth, caged, and not a soul has for them a friendly word. The medical supervision of them is totally inadequate; they have no proper personal attendance; they are without amusement or occupation of any sort. Some of them are taken out at long intervals for an airing or to be washed, possibly by standing them naked in a corner and throwing water upon them with a hose. Others remain in their cells or dens from one end of the year to the other. Their mental malady is aggravated by neglect and cruelty and their only hope in death." Such is the language of the Illinois State Board of Charities, late in the nineteenth century, respecting the county provision for the insane in this State, and these statements supported by facts, for example, in Adams county: "It is cruel and improper to confine thirty-two insane in their rooms without opportunity for freedom of action or recreation. A man spoken of as under restraint, wears a chain. A female insane pauper, who put out her eyes, occupies a large wooden box filled with straw in company with another blind insane woman. They are both filthy in their habits, and neither of them wears any clothing." Brown county: "An insane man is very filthy in his habits and is kept at night in an out-house, where he sleeps on straw in a box on the floor. The straw is not renewed as often as it should be." Champaign: "The condition of the insane department is very bad. The rooms are filthy, the beds and bedding ragged and dirty." DeKalb: "One insane man is locked up in his cell and is not taken out for any purpose. He is filthy in his person, and his room is in the same condition." DeWitt: "There is an insane pauper on this farm who wears a ball and chain." Fulton: "The insane department is entirely unfit for use and should be abandoned. The ventilation is poor and a foul odor pervades

it throughout. A insane man is nude all the time and is rarely if ever taken from his cell. * * * An insane woman is also nude most of the time; both of them filthy in their habits and exposed freely to the gaze of every inmate on the farm who chooses to look at them. * * * The sexes are not separated." Hancock: "A large number of the insane are imprisoned in their rooms from one end of the week to another." Kankakee: "Some of the insane go naked at times." Lake: "The insane locked in their cells in the basement are much to be pitied. Four of these cells were found to be very filthy and the odor from them was very offensive. One insane man is very violent. His entire costume is a shirt and handcuffs. The handcuffs were bright; the shirt was not." McDonough: "One of the insane men wears a chain." Mercer: "One insane woman is sometimes locked in a cell as dark as a dungeon." Moultrie: "An insane woman occupies a pen in the winter time, which is placed in the corner of a room. The dirty condition of the premises is a disgrace to the keeper." Peoria: "Three insane men are confined in cages in the basement. These cages are in very bad order and very offensive on account of the filthy habits of the inmates, who are naked a great part of the time." Union: "An insane woman spends most of her time in a sitting position with her knees drawn up to her chin. She destroys bedding and clothing and sleeps in a pen in one corner of a room. The pen is three feet wide by six long, and the bedding consists of some straw and old tattered quilts, which were in a filthy condition." Whiteside: "It has beautiful grounds in front. Its weak point is the insane department. Of the forty inmates, twenty were insane and sixteen in seclusion. It is impossible that any necessity exists for secluding so large a proportion of the insane." They "do not receive a sufficient amount of food."

These citations at random from recent reports of the State Board of Charities illustrate that the insane in the county almshouses are in a pitiable state. The history of the insane in Cook county has passed through much the same phases.

"Without a very efficient superintendence, chiefly to be exercised by the chief medical officer, the mere absence of mechanical restraint may constitute no sufficient security against neglect or even ill-treatment of patients in a large asylum. The medical officers who consider such watchful supervision not properly comprised in their duties have formed but a very inadequate conception of them."

In consequence of the public outcry, a seemingly complete change in the management of the institution was made. A new superintendent was appointed, the wardenship was abolished, and a consulting board composed of three reputable neurologists, Drs. Jewell, Lyman and Brower, and a medical politician, was appointed. In consequence of the repeated pigeon-holing of his suggestions and the complete ignoring of them by the Charities Committee, which continued to run the institution on a political basis, Dr. Jewell resigned, and a year later, in consequence of the intrigues by the medical politician and the medical superintendent, Drs. Lyman and Brower also tendered their resignations. From this time on the institution was run on a political system, but of its inside history little is obtainable until the year 1883, when Dr. S. V. Clevenger was elected special pathologist.

Through his suggestions, which stimulated outside influences, a lady physician was appointed. This lady had been a missionary in China, given to self-sacrifice; a lady of rare personal merit, ability and conscientiousness. Of the period 1883-4 she writes from her personal observation: "From the first I was struck by the lack of system or organization that prevailed.

No histories of cases by the physician in charge were kept; no census, and very meagre records of any description. The visits of the superintendent to the wards were few and hasty. In each ward was kept a bottle of whisky and a bottle of strong sleeping medicine of bromides and chloral which the attendants dealt out at their discretion. Many times on being called to a patient I received this history of the case: 'I gave her a drink of whisky and then a dose of sleeping medicine, but she did not get any better, so I called you.' It took some time to impress the idea that I preferred to be called before the ever-ready remedies were used. Evidently a physician had been a luxury and only called as a last resort. I have known of attendants hiring patients to work for them by giving them whisky and sleeping medicine, which they (the patients) had come to crave as the opium-eaters their opium. The amount of this sleeping medicine used in the female wards alone was enormous, as was also the whisky. It is safe to say the amount used in the female wards alone, with less than 300 patients, was twenty times more than is used in the entire institution of over 1,400 patients at Kankakee, and the noise at the latter institution is much less than at the Cook County Asylum. That the attendants, both male and female, helped themselves quite largely from the ward whisky-bottle, which was filled whenever they desired, is beyond doubt. The real needs of the patients seemed to call for no thought. They had no bath-towels, and attendants were in the habit of putting the clothing on the patients without drying the skin. The wards were frequently cold, and the patients had no winter clothing. Many who would have been benefited by out-door exercise did not leave the ward once for six months, because there were no wraps. No system was adopted in regard to clothing, and no account taken of what patients brought to the hospital. The

bedding was at all times insufficient. Restraint was used at the discretion of the attendant, and I have seen a patient jacketed, unable to use her hands, eat her food from the platter like a wild animal. The food is almost beyond description. Where in the State institutions will you find deaths from scurvy frequent? Where but at the Cook County Asylum will you find two patients fiercely fighting for a small potato, given only as a Sunday luxury? Where will you find the hog's head, hair and all, given to the patients? I have often picked out the half of a hog's ear, with the hair on it, from a dish set before the patient to eat. I have picked out bunches of hair half as large as my little finger from the patient's food. Dying patients, if fed at all, were fed on sour milk. The milk, which is so great a necessity in the treatment of the insane, was almost never fit for use. They had meat never more than once a day, and often not that. The scurvy alone will speak for the vegetables. Whisky and sleeping medicine seemed to be the only articles of diet which never ailed. The drug-room was the greater part of the time turned into a saloon. Often I have had to wait for a prescription which was needed for an urgent case, until the druggist had served with beer, port, sherry or whisky, a room full of men. I never visited the drug store but with trepidation, and always breathed more freely when I left its degrading atmosphere." Of the same period, a lady attendant writes:

"As I was attendant in two State institutions prior to entering Jefferson, I was in some measure prepared to form an opinion of the management of the institution during 1883-84. Management or system there was none. The attendants on the female side of the house indulged freely in stimulants, and I have on more than one occasion observed at least three of them under the influence of liquor. Some of them used, in presence of the male attendants, decidedly coarse language.

In every ward a bottle of sedative mixture and a bottle of whisky were kept, and these were administered freely by the attendants. It was a common remark: 'It is no use doing anything for these cranks.' The physician was called only as a last resort, and though diarrhœa and scurvy were very frequent, but little attention was paid to the diet; sick patients were fed with the same food as the others. The great article of diet was pigs' heads, boiled without being shaved or cleaned. The meat frequently stank. The clothing and cleanliness of the patients received but little attention. For weeks and weeks we were without fine-tooth combs. There was no discipline. The engineers and other mechanics had keys to the female wards, and the assistant engineer frequently visited them in an intoxicated condition, often cursing the attendants. Every Saturday a dance was held, and beer kegs were frequently brought up into the dance hall and emptied by the attendants and employés after the patients had retired, festivities being kept up till morning. Restraint was used by the attendant at discretion. The night watch paid but little attention to their duties—how little may be seen from the fact that a patient was found dead one morning, partially eaten by rats. The superintendent never went through the wards except in company with visitors, but every morning stuck his head in the door and asked if all was right. The washing of the patients frequently disappeared when sent to the laundry. I saw what I never saw in any institution, the superintendent douse with cold water a patient in wristlets because she called him names. This was during the superintendency of Dr. Spray. I was asked if I would take the position by a medical friend and accepted, not knowing until too late that a warden was to be elected who had been a keeper of a saloon in which gambling was practiced, nor until much later that he was to

be supreme. How the incongruity of such procedure of the Board struck intelligent laymen may be gleaned from the newspaper reports of the time, of which I cite one:

“After going about the grounds the committee met in the parlor of the asylum for the purpose of deciding upon what the duties of the Warden and Medical Superintendent should be. No two Commissioners could agree, and after the committee had adjourned it left the reporters present in doubt as to whether the head cook or the chief doctor was the real manager of the institution. There was a wrangle as to whether the new Medical Superintendent or the Warden should be the head of the establishment. It was finally decided that the Medical Superintendent should be held responsible for the hiring and discharging of the nurses, and that the Warden should be responsible for the general management of the institution outside the medical department. The Medical Superintendent is supposed to be responsible for the inmates, but it is left with the Warden to hire the supervisors of the wards, whose duty it is to watch the attendants of the lunatics and also to dispense the medicines to the patients. Chairman McCarthy was appealed to to help the committee out of their muddle, and, as he had helped to put the management of the institution in its present fix, the only thing he could recommend was to have the Warden make all appointments of attendants in the asylum, and at the same time hold the Medical Superintendent responsible for the latter's actions. The wisdom of this suggestion was so obvious that Commissioner Ochs said it was a piece of d——d nonsense to let the Warden hire the supervisors of the different wards and at the same time hold the Medical Superintendent responsible for their actions. This objection was clearly well taken, but the Commissioners not being able to meet it passed it after their

usual careless manner and hurriedly adjourned their session, leaving the Medical Superintendent and the Warden of the establishment to decide the question of supremacy in office between themselves. Dr. James G. Kiernan is undoubtedly an able physician, but should Varnell, the newly-appointed Warden, and himself get at loggerheads as to which of the two is in authority, the matter would give the County Board something to think over.'

"Within three months all power was taken from me except the right to enter protest. I found the institution in a wretched condition. There was no means of determining just what patients were in the building, and, as a careful census revealed, there were four more patients on the register than in the institution. In a remote ward patients were found with ulcers swarming with maggots, and none of the patients of the ward had been out for months. The drug store was destitute of the most necessary articles, there being but one drachm of quinine in the whole building, and many patients ill from low types of intermittent fever. The drug store was a gin mill to which employes invited the politicians who visited them. The druggist, a conscientious, able pharmacist, complained bitterly of being turned into a bar-tender, as he did also of the vile drugs sent him. The bread was badly baked and full of lumps, and the baker was half drunk most of the time, so that I was able to soon secure his dismissal. The male attendants were, as a rule, coarse, brutal men, and within two months I had occasion to discharge five of them for striking patients; receiving my first taste of the discipline hitherto prevalent in the institution by being knocked down and called a "crank" for interfering with one individual amusing himself by pounding a dement. The Saturday night dances already mentioned were marked by the conduct described ten years ago by the *Tribune*

article. The female wards were visited at all hours by the male employés, most of whom had keys. I issued a few necessary orders and made an attempt to regulate these and other evils in the first month, and a great turmoil followed. Of some of this turmoil Dr. Clevenger gives a good description.

"DR. KIERNAN'S first order was for the attendants to restrain no patient without an order from a physician, which were all recorded in a restraint book. A great uproar followed. This was an unheard-of proceeding there, and much nonsense was uttered over the new order. The next order was that the night-watch should not issue medicine to the patients at their own will, but were to call upon the physician. The watchmen conspired to make the physicians sick of the arrangement by waking them up repeatedly and unnecessarily, but the promptness of the doctors defeated the watchmen, and many of the patients rested well without sleeping medicine being given them. Among the new arrangements which disgusted the gang, was an order that all who were employed were required to take off their hats when going through the wards and to address the patients as Mr., Mrs. or Miss, as the case might be, in lieu of more familiar and contemptuous appellations hitherto commonly in use." How little was accomplished despite strenuous efforts may be gleaned from the following record, kept by DR. HOWE, Nov. 7, 1884: "The condition of the female patients as regards clothing was and is pitiable. In one ward there are thirteen beds which have no clothing, except a sheet and a thin spread. The other beds of the ward have but one thin spread or blanket in addition. This condition was reported six weeks ago, but nothing has been done to remedy it. In many of the wards there is not enough underclothing to go round, to say nothing of a change for each pa-

tient, and frequently when the wards have a temperature of 60° F. aged and feeble patients have but two garments to cover them. Patients whose recovery depends on out-door exercise cannot go out because they have nothing to keep them warm. Others, who have been ordered milk diet, could not get the milk on the doctor's order. While the patients have been suffering from lack of clothing, the housekeeper and other employes have been keeping many of them at work on quilts and fancy work for their own ease. The doctor, anxious to get the patients clothed, urged them instead of doing fancy work to put their time to the necessary sewing and knitting. The Medical Superintendent issued an order that the patients were to do no fancy work without his order. The housekeeper openly violated this rule, and repeatedly brought work surreptitiously to the patients, thus encouraging them in the belief that the Medical Superintendent was persecuting them by not allowing them to do fancy work. In one ward eight garments were made in one day by the patients, and the moral influence of the idea that they were working for each other was decidedly beneficial, and as much so as the hopeless, unending fancy work was detrimental. The warden forbade any cloth to go to the wards, effectually nipping in the bud the healthy enthusiasm which the doctor and some of the more interested attendants succeeded in arousing. Patients have been shut in their rooms and told they could not come out till a certain amount of fancy work was done for some employé. The housekeeper has come round the wards with her apron full of fruit and other things, and given them promiscuously around without reference to the physical condition of the patients. Troublesome cases of dyspepsia were fed on pie, diarrhœa patients on fruit. She never brought fruit into the wards until the order about fancy work was is-

sued, and fruit asked for for a case of scurvy was denied contemptuously by her." As an illustration of how the temperature of the building was attended to, the following citation will serve: History Book D 2, November 7, 1884. Mary Ann D. "Has been worse since local treatment was stopped, which I was obliged to do on account of my room being cold, so that I had no suitable place for treatment." I pass without comment over the numerous assaults made on myself, and would only call attention to the facts that, during April, May and June, 1885, no efforts of mine could secure fine-tooth combs for the patients until I sent out to another institution and borrowed them, becoming personally responsible. During the same period the practice of allowing the mechanics (most of whom were ward workers and knew nothing about their trade, which they learned after appointment,) keys to the female wards continued, and one of these men was detected, somewhat *en dishabille*, attempting to enter a female ward at one o'clock at night. The keys were then taken away, but were given back after September, and on the night of September 9, a calciminer was detected attempting to enter the female ward. Of the food during this period I shall need to cite but one instance. Despite my efforts, no dietary table was ever adopted. In consequence of a suicide, due to neglect by an attendant whom I had long tried to have discharged, a species of examination of everything was made by the Charities' Committee. The cook was asked if the food was always good, and despite the fact that there were twenty cases of scurvy in the house that very day, said, Yes. Whereupon the lady physician held up the iron-ringed, unwashed snout of a pig suffering from catarrh, which had been taken from the patient's food that very day and asked if that were a specimen of the good food. The decision of the Commissioners was that the only way to

prevent the finding of these things in the food was to have no lady physician, and her resignation was thereupon demanded.

I have detailed enough to show that for the past two years Cook County Hospital for the Insane differs from all other institutions of the kind in being a refuge for ward workers. And now comes the serious question of cost. I quote from the *Daily News*, having verified the figures from the New York State Commissioner on Lunacy's Report and that of the Illinois State Board of Charities :

"A comparison of the cost of maintaining the indigent insane will give some idea of the magnitude of the steal in this one line. Last year the 567 Cook County Insane Asylum patients cost \$188,039, being at the rate of \$331.63 each. During the same time 841 patients at Binghampton, N. Y., cost \$72,055.52, 533 at Elgin cost \$109,519.33, 595 at Anna cost \$115,360.84, 633 at Jacksonville cost \$112,888.45, 639 at Kankakee cost \$101,232.80, 1,743 at Willard, N. Y., cost \$273,949.48, and 1,285 in the New York County Insane Asylum cost \$162,569.34. The average cost of each insane patient in the Illinois State institutions was \$184.02, and in the New York institutions it was \$184.23. In the New York County Insane Asylum it was \$126.51." To these figures may be added some taken from Alabama.

COOK COUNTY.

	Patients.	Cost.
1883.....	597	\$170,000
1884.....	567	188,039
	1,164	\$358,039

ALABAMA.

1883.....	438	\$63,834.89
1884.....	555	72,897.83
	993	\$136,732.72

When it is remembered that the Alabama and New York institutions are among the best managed institutions in the country, the contrast becomes startling. I say nothing of the discrepancy of \$53,000 between the 1883 report of Superintendent Spray and the report of the Clerk of the Board; \$117,000 being expended, according to Dr. Spray, and \$170,000 according to the clerk of the Board. Having pointed out the evils, it now becomes necessary to suggest a remedy. The condition of the hospital is to day substantially what it was ten years ago, and a change in individuals works but little improvement.

A complete change in the system is required, and this can be secured only in one way, and that is by giving the State Board of Charities, as I suggested in this SOCIETY two years ago, and as is done in Wisconsin, complete control over all almshouse expenditures and appointments. All the evils mentioned result from deficient power of supervision and control by the State Board of Charities, and this Board should also be aided, as in New York, by volunteer visitors in the different counties, to whom they could delegate their powers. Laws to secure these results should be passed when the Legislature meets, for until this is done the condition of the insane in county institutions will remain, as it is, a disgrace to Illinois.

Central Music Hall.

EDITORIAL.

COUNTY PROVISION FOR THE INSANE.

DR. JAMES G. KIERNAN read a paper, entitled COUNTY PROVISION FOR THE INSANE, before the CHICAGO MEDICAL SOCIETY, on Monday evening, nineteenth October, 1885. The paper appears in full in this issue of the JOURNAL.

We desire to call attention to DR. KIERNAN'S timely suggestions. The discussion of the subject is impersonal and fair. On motion, a committee was appointed by the PRESIDENT of the CHICAGO MEDICAL SOCIETY to investigate the condition of the COOK COUNTY INSANE ASYLUM.

On Saturday night, twenty-fourth October, a meeting of citizens to discuss the present condition and alleged mismanagement of the COOK COUNTY INSANE ASYLUM was held at the Sherman House. The meeting was a representative one.

A committee was appointed to investigate the alleged mismanagement, collect evidence and report at a public meeting.

The profession and public generally expect positive results from the investigations of these two committees. Up to the present time, all attempts at inquiry have proved abortive. The causes of failure are not obscure. Inattention to duty may be mentioned as an important one. The methods of investigation, practiced under such conditions in English insane asylums, are worthy of serious consideration.

CHICAGO AS A MEDICAL CENTER.

A well-known statistician recently made the assertion that the total number of matriculates at the various Chicago medical schools, regular and irregular, exceeded that of any other city in the United States. We are not in possession of the facts necessary to corroborate this statement. It is certainly true, however, that the number of medical students in Chicago is considerably increasing. The facilities for clinical instruction are rapidly multiplying.

The completion of ST. LUKE'S HOSPITAL has added materially to the resources of the CHICAGO MEDICAL COLLEGE. The PRESBYTERIAN HOSPITAL, now in process of construction, will prove an invaluable adjunct to the RUSH MEDICAL COLLEGE. Rooms in the handsome edifice of the COLLEGE OF PHYSICIANS AND SURGEONS have been appropriated for the use of patients, and we are reliably informed, plans for a new hospital, to be attached to this institution, are in the architects' hands. A hospital for women has been recently built on the West Side, and a Lying-in Hospital is in process of construction on the South Side.

Under the operation of the new Anatomical Act, it is reasonable to expect that material for dissection and the study of gross pathology will be abundant.

We have, however, no physiological laboratories, and no facilities for experimental research. Until this want is supplied, Eastern medical schools will retain their acknowledged superiority.

"WORDS AND THEIR USES."

We observe with great pleasure signs of progress in medical journalism in a recent issue of our esteemed contemporary, the *Journal of the American Medical Association*.

Attention is called in an editorial to certain "misused words." We hope to be pardoned if we presume to suggest that some reasons should be adduced, when an editor engages in verbal criticism, and advises changes in the use of terms. "Apt" is frequently written when "likely" should be employed. RICHARD GRANT WHITE says, with reference to the use of "apt," "This little word is in danger of losing its fine sense, and of being degraded into a servant of general utility for the range of thought between *liable* and *likely*." "Aptness and liability both express condition—one of fitness and readiness, the other of exposure—inherent in the person or thing of which they are predicated."

With reference to the use of the word "allude," we fully agree with our editorial brother. "*Allude* is not a fine sounding synonyme of *say* or *mention*." "*Allude* (from *ludo*, *ludere*, to play) means to indicate jocosely."

Great difference of opinion exists as to the use of the words "diagnose" and "diagnosticate." Etymology throws little light upon the subject. Usage undoubtedly favors the employment of "*diagnose*."

However, we are not disposed to be hypercritical, and cheerfully accept the editorial strictures, appearing in the *Journal of the American Medical Association*, as an augury of what that periodical is likely to be with reference to the correct use of English terms.

THE NINTH INTERNATIONAL MEDICAL CONGRESS.

Notwithstanding the "spleenful mutiny" on the part of the *Medical News*, the *New York Medical Journal* and the *New York Medical Record*, the prospects of a successful INTERNATIONAL MEDICAL CONGRESS, at Washington, in 1887, continue

to be encouraging. The professional eminence, energy and perseverance of the medical gentlemen, to whom the preliminary arrangements of the Congress have been intrusted, render a favorable issue of this vexed question highly probable. The *animus* of the conduct of the New York Medical Journals in the controversy is obvious. Commercial interests have unfortunately substituted just regard for professional honor. We hesitate to ascribe to personal pique the anomalous conduct of the *Medical News*. Yet the scrupulous regard to probity which has characterized the first century's existence of the publishing house—of which the *News* is the organ—forbids any other conclusion.

FOREIGN CORRESPONDENCE.

LAGORIO. NEW METHODS IN THE TREATMENT OF CHOLERA.
*To the Editors of the CHICAGO MEDICAL JOURNAL AND EXAMINER,
Gentlemen:*

In some of my former communications I had occasion to speak of hypodermocclisis (subcutaneous injection of warm, salted water), which was largely made use of during the cholera epidemic of last year throughout the kingdom of Italy. I have been for some time anxiously awaiting a report, as to its real efficacy, the indications for its use, and how and when it was to be used. At last it has appeared, and a valuable one it is, being from the pen of the originator, the illustrious PROFESSOR ARNALDO CANTANI, of Naples (*Morgagni*, July, 1885). Since 1865, the Professor has proposed this operation in the treatment of cholera, for it replaces in the system the amount of fluid lost through the intestinal discharges, which are one of the most important causes of death.

He gives the history of 226 cases of Asiatic cholera treated with his method; of these, 155 recovered, and 71 died. If we consider that the hypodermoclysis was only performed in the worst and most desperate cases, and that it gave such a large percentage of cures, we must look upon it as a useful curative means. The operation has met, especially in Naples, great opposition, but generally from physicians who had practiced it in an imperfect way, and therefore with negative results. PROFESSOR MARINI did it in 101 cases, with 92 recoveries, and only 9 deaths, which occurred in those cases in which the stage of collapse had reached the highest degree. DR. POGGI used it in 15 desperate cases, with 9 recoveries, 7 of which were in an advanced stage of collapse. PROFESSOR MARAGLIANO, of Genoa, also speaks of it with great praise. The operation consists in injecting slowly, with a suitable apparatus, into the lateral regions of the abdomen, the following solution: chloride of sodium, 4 grams (3i), carbonate of sodium, 3 grams (gr. 45), water, one liter, previously warmed to 38 or 40 degs. Cent. When the patient has reached the cold stage of asphyxia, the amount of liquid to be injected at one time must never exceed 1,500 c. c.; 800 to 1,000 c. c. are sufficient in most cases; 500 to 600 c. c., when the patient is in a typhoid state. It is indispensable that in most cases the operation be repeated *several times* at brief intervals, until the pulse becomes stronger, respiration better, cyanosis diminished, and the urine reappears. The intervals are to be shorter, especially in the typhoid state.

Besides hypodermoclysis, another operation called enteroclysis (injections of medicated warm solutions into the intestines per rectum) also gave very brilliant results. As CANTANI has already written (*Morgagni*, 1879), the direct treatment of the intestine, which is the primary and principal region

affected in cholera, is the most rational, especially in the beginning of the choleraic infection, so as to be able to abort the disease. The Professor has devised and introduced in practice an apparatus, already well-known in the kingdom as Cantani's enteroclimus, which has been proven to be able to pass the ileo-cæcal valve and inject the liquid into the small intestines by an anti-peristaltic movement that this method excites. To disinfect the locality of the disease, which is the seat of the choleraic microphyte, many substances may be used; all the acids capable of rendering the intestinal contents acid. Muriatic, nitric, phosphoric, sulphuric acids may all be theoretically useful, not in killing the choleraic microphyte in the doses in which we are permitted to introduce these acids into the intestine, but to depress the vitality, diminish the power of multiplying, and the vegetative activity. We have also anti-parasitic disinfectants, as carbolic acid, salicylic and boracic acids, sulphurous acid, thymol, resorcine, etc., etc.; also perchloride, sulphate of iron, nitrate of silver, tannic acid, etc. Above all, *corrosive sublimate*, a most potent poison to vegetable life and parasiticide to the comma-bacillus in a proportion which permits its introduction by enteroclysis (1-2 centigr. in two quarts of water). CANTANI has experimented with tannic acid and was highly pleased with it. This remedy is an excellent astringent and tonic to the relaxed vessels, is also a good sterilizer and prevents the multiplication of the bacillus, although it does not kill it.

Enteroclysis was also adopted to *excite* and *warm* the organism, and was, therefore, made *very warm*, 39° to 40° C. If an enteroclysis of two quarts of *cold water*, repeated several times a day, has proven to be the best cooling agent for a typhoid fever patient (by far preferable to the cold bath, for it does not cause such a violent reaction); an *enteroclysis of two quarts*

of warm water is also the best warming agent for a patient with sub-normal temperature, and is the *best stimulant* for an intestine which is beginning to be paralyzed and to lose its power of absorption. It is an internal warm bath without the inconveniences of an external warm bath. It has shown its power to prevent anuria, and the excessive thickening of the blood and draining of tissues, and, therefore, it *keeps* and *restores* to the intestine the power to absorb water, which is very important in Asiatic cholera. From all this we can easily understand that when employed in the beginning of the disease, it may abort the attack of cholera, and when repeated many times a day may prevent the stage of asphyxia. In cases where diarrhœa continues, the warm tannic acid enteroclysis is to precede the hypodermoclysis. The quantity of liquid ought to be $1\frac{1}{2}$ to 2 quarts of water with 3–6 grams of tannic acid (as high as 10 grams, according to Maragliano) to each quart of water, of infusion of chamomile flowers or of walnut leaves, warmed to 40° C. Sometimes both operations are made at the same time, if the diarrhœa is persistent, and the collapse of the patient lasts. Prof. Cantani admits two stages of cholera: first, of *infection*; second, of *intoxication*. The comma-bacillus acts directly in the first stage; after this the incubation of few days, and the intestinal irritation with diarrhœa and vomiting, and hence the draining of tissues by the rapid loss of serum.

In the second stage there is acting a *ptomainic poison* which may be produced in the tissues themselves by the chemical necrobiolysis of many histological elements, broken up by the suspension of the material change, representing, therefore, a *cadaveric ptomaine* produced during life (ante-mortem),—and may also be produced by the comma-bacillus itself, by the process of fermentation which it undergoes in the contents of

the intestine, and becoming absorbed in the blood gives in the manner a *specific ptomaine* of cholera. In both cases the poisoning of the nervous centres and of the sympathetic and progressive paralysis of the heart are caused by the presence of the ptomainic poison in the blood. In lighter cases *infection* is the cause, while in the worst cases there is an addition of ptomaines more or less poisonous, more or less abundant according to the conditions of the intestinal contents encountered by the bacillus. In the rapid (fulminant) cases the development of pernicious ptomaines may be so rapid and great in quantity or quality, that intoxication prevails over infection, so that it may produce its paralyzing effects before the latter can irritate extensively.

In considering the causes of death by cholera, the main factor is certainly the lowering and final arrest of the circulation, and the progressive paresis and paralysis of the heart. A progressive thickening of the blood is a result, caused by the great loss of liquid in the diarrhoea and vomiting. This thickening of the blood so disturbs the nutrition of the entire organism, as to stop the material changes and to render impossible the elimination of the products of consumption by the histological elements of the different organs and tissues.

At first the heart endeavors to conquer the increasing obstacle, which thick blood always opposes; the contractions become more frequent, but finally they cannot overcome it, and the blood stagnates at the periphery, causing cyanosis and a lowering of the peripheric temperature; the stasis increases from the periphery towards the center of the circulation; finally the force of the myocardium is not sufficient to empty the ventricles, and the heart stops.—It is evident that to combat this cause of cardiac paralysis and of death, the only

rational means is to restore to the blood the lost fluid, which, if done by the warm alkaline salted hypodermocilisis, which re-establishes the fluidity of the blood, the material changes in all the organs, and in the heart itself, and facilitates the elimination of retained excrementitious substances which poison the organism; moreover, the injected water excites by its warmth the depressed nervous centers, and dilutes the poison concentrated in the blood, provided it is made in time to be absorbed.

The enterocilisis of large quantity of liquid is another rational means of combating the development of the ptomaines themselves in the fœcal matter of the intestines, it promotes the elimination from the intestine of ptomainiferous and fermenting masses, and stops, therefore, the absorption of these poisonous ptomaines; besides, by using disinfectants, anti-fermentatives and antidotes, we can stop the vegetative activity, the ferment of the bacilli in the intestines, and the further production of ptomaines, which we can possibly render innocuous by altering them, destroy or transform them in combinations less easily absorbed or less poisonous. Another cause of death is certainly a diminished alkalinity of the blood. This we remedy by adding to the liquid the alkaline salts of sodium.

I can bear testimony to the usefulness of the warm tannic acid enterocilisis, so much used by Prof. Maragliano, of Genoa, during the epidemic of September and October of last year. It was always the first thing to be done to almost every cholera-stricken patient, and many lives were saved by it. In many the attack was shortened, in others it helped to bring them to a successful cure. Stimulants and sedatives were also used as needed. The percentage of deaths only reach 30 per cent.

Cantani has also proposed to *combat the cholera bacillus in the intestines with other bacteria hostile to it, but not harmful to the man*. At present he has mentioned the *Bacterium termo*, which possesses the two properties of destroying the cultures of the comma-bacillus of Koch without harming in any way the man, and without causing any inconvenience in the intestines. This he has proven with the enterocloisis in sound individuals. Possibly other bacteria are equally useful. Considering that the ordinary chemical disinfectants are generally more dangerous to man than to the parasites, if used in the doses required to destroy the pathogenic microphytes, and considering, also, that the great law of nature presents life to us as a struggle for existence, in which the feebler succumbs to the stronger, and this triumphs at the death of the other, we ought to investigate all the microbes hostile among themselves, but innocuous to the organism of man, and the ones we can place against the pathogenic ones which cause a specific infection, above all if the seat of the infecting bacterium is easily accessible, as in intestine in case of cholera, typhoid fever, dysentery: as in the genital tracts (gonorrhœa, etc.); and as in the respiratory canals and in the fauces (pertussis, diphtheria, etc.). It may be a microphyte will be useful against several other pathogenic ones, or probably some infection will not be fought except with a special microphyte, as small-pox with vaccination, . . . with a view entirely different from that of JENNER and PASTEUR, who want to extinguish the susceptibility to an infection with the attenuation of the same virus. In many cases this bacterio-therapy, this biologic treatment, prophylaxis and hygiene seems certain to have a great future, and is worthy the attention of all colleagues who are sincerely scientific and honest physicians.

A. LAGORIO.

Chiavari, Oct. 2, 1885.

SOCIETY REPORTS.

TRANSACTIONS OF THE CHICAGO SOCIETY OF OPHTHALMOLOGY AND OTOTOLOGY.

The Chicago Society of Ophthalmology and Otology met August 11. Drs. F. C. Green and F. W. Coleman were proposed for membership. The following papers were then read:

One on an

OPERATION FOR MALFORMED AURICLE,

by Dr. S. S. BISHOP.

He said: On July 11th, Nettie H., eight years old, presented herself at my clinic at the Illinois Charitable Eye and Ear Infirmary, and said she "wanted her ears put back." Both auricles were so abnormally prominent as to mar materially the symmetry of a very shapely face and head. The left auricle, which was the more unsightly of the two, projected one and a quarter inches at a right angle from the junction of the auricle with the mastoid process, and then bent forward, thus forming what is facetiously termed "lop ear," or "dog ear." The natural elevations and depressions were obliterated, and the organ presented the appearance of having been flattened by the pressure of the head in sleep on an auricle folded forward upon itself. The right ear projected forward one inch, but was not so imperfectly shaped as the left one.

At first I contemplated moulding the auricle into shape in a dressing of plaster of Paris, which would retain the parts in position for several months, with proper care and renewed

dressings. But on account of the youthfulness of the child, which would render it highly improbable that she would co-operate in that treatment with sufficient persistence to insure success, I performed an operation, with the consent of her parents, and the assistance of Drs. Hawley, Abbott and Walker.

On July 17th last, the little patient was anæsthetized with ether. An incision one and three-quarters inches long was made on the posterior surface of the auricle, about one-half inch from the free border of the cartilage and parallel therewith. Another curvilinear incision internal to the first was made, to unite its extremities. Those incisions extended only through the skin and subcutaneous tissue, and were made to embrace about one-half inch of integument at the widest divergence of the lines of incision. After dissecting off this skin and subcutaneous tissue, two incisions parallel to the first were made through the cartilage, and an elliptical section of this was dissected off from the skin covering the anterior aspect of the auricle without wounding that integument. The portion of cartilage removed was not quite as wide or long as the section of skin taken from the posterior surface of the auricle. The edges of the wound were united by three sutures, which included the skin only, and the parts were dressed with absorbent cotton and wet bandage. Union by first intention occurred, and the sutures were removed the fifth day. However, the patient chose a pleasure excursion in preference to the clinics before the wound had healed thoroughly, the dressing became displaced and the wound was torn open along the center. Consequently this portion of the wound healed later by granulation. There was but slight pain or swelling, and the child evinced no dread of an operation on the other ear, except with respect to the ether.

The result of the operation is that the auricle now projects

but three-fourths of an inch instead of one and a quarter inches, making a difference of one-half inch between the projection before and after the operation. Besides this, the natural elevations and depressions which are requisite to the beauty of a well-formed ear have been restored.

I do not know that any surgeon has previously performed an operation identical with the one I have devised, but when a learned professor informs the French Academy of Sciences that before the illustrious Jenner was born, and "from a period so remote that it loses itself in the night of time," the inhabitants of Senegambia have practiced inoculation for the prevention of a contagious disease, I have not the temerity to call any operation new. A short time since I thought I had originated another new method of treatment, when, to my surprise, I learned that Dr. Sexton, of New York, had been experimenting in the same direction, although he had not published the fact.

Drs. Ely and Roosa have operated in a different manner to effect a similar result. They transfixed the auricle at its junction with the side of the head and removed the cartilage and the skin covering both the anterior and posterior surfaces. By the operation which I performed it is apparent that the integument covering the anterior surface of the auricle, or the part most exposed to view, was not at all injured. I was not able to ascertain the exact result in Dr. Ely's case. In Dr. Roosa's case the projection before the operation was the same as in mine, but the projection in my case after the operation was one-eighth of an inch less than in his case.

The next paper, on

SUN-BLINDNESS,

was read by Dr. C. F. SINCLAIR.

He said: The danger from blindness from the direct rays of

the sun, which appears to have been generally recognized, not only by the medical profession, but by the laity as well, of the past generation, is apparently unrecognized to-day. During the recent eclipse many might have been seen looking at it with the naked eye. It is not uncommon by patients to tell the physician, as a proof of strong vision, that they can look steadily at bright lights, and even at the sun, without blinking. Children not unfrequently undertake competitive trials to see which can gaze longest and most steadily at the sun.

In many of the recent smaller works on ophthalmology the subject of sun-blindness is not mentioned.

Nettleship, Lawson, Williams, Schiøeps and DeWecker refer to the possibility of blindness being caused by flashes of lightning, by the bright glare from snow, and from a too-prolonged gaze at a brilliant artificial light, but the possibility of a like result following from the direct rays of the sun is not referred to. Sælberg Wells mentions the subject, but in the most cursory manner, simply saying that blindness may follow if the eye is long exposed to bright sunlight. He further points out the difference which may exist in the density of the cloud or disk, and which may last only a few moments, or days, or weeks, or even longer. The prognosis in his view appears to be favorable. No reference is made to any pathological condition. The treatment recommended is rest, protection from bright light with suitable colored glasses, cod-liver oil and steel. The majority of recent writers, however, have ignored this as a cause of blindness—a cause which, from the carelessness of adults and the ignorance of children, may well be considered one which is most practical and vital.

In a more recent work by Swanzy, of Dublin, the subject is considered at somewhat greater length. He refers to the semi-blind spot which appears in the field of vision after ex-

posure, and which, however, may be absolute. In his experience, even in mild cases, this cloud seldom entirely disappears. The ophthalmoscope shows a small bright white spot at the fovea centralis surrounded by a blood-red ring which fades off into the normal color.

A recent monograph by Deutchmann, of Göttingen, gives us more definite information as to the pathological conditions in these cases. His investigations were undertaken more particularly with that end in view. He cites four cases which came under his care in 1882. In one of these a blue glass had been used in looking at the eclipse. Still the result was the same. In all the cases, immediately after looking at the sun a small cloud appeared in the center of the field of vision, and examination showed a small central scotoma.

Vision was impaired in the same degree in three of the cases, being $\frac{2}{3}$. In one of the cases which came under observation two months after the first appearance of the blind spot, vision had already considerably improved, being $\frac{2}{3}$ without difficulty. The finest print in all these cases was read with difficulty. In none of Deutchmann's cases were the scotomata complete, and yet in none was perfect vision recovered. Pathological changes were found in all, viz., a small bright white spot in the centre of the macula lutea, and around this a red ring which gradually faded off into the normal retina. To verify these results Deutchmann undertook a series of experiments on the eyes of rabbits.

The direct rays of the sun were condensed by a concave mirror and then rendered parallel by a convex lens. They were then directed into the retina through the dilated pupil.

The resulting appearance was similar to those seen in the eye, *i. e.*, the small central spot of anæmia with the surrounding

areola of hyperæmia—these results following an exposure of only a few seconds' duration.

An examination with the microscope showed that an extremely small area of the retina was disorganized by the coagulation of the albumen in its tissues with hyperæmia, exudation, diapedesis of blood corpuscles and pigment disturbance surrounding it.

Based upon these pathological changes, the unfavorable prognosis which Deutchmann gives in these cases would seem to be well justified. The following case, however, which came under my observation the 28th of last March, presents phenomena difficult of explanation, if we accept the view that these pathological changes are an essential element in sun-blindness.

Howard D., a lad thirteen years of age, looked at the sun several times during the eclipse of last March. Finally, after a somewhat prolonged gaze, he felt slightly dazzled. Then, wherever he looked, objects seemed colored with quickly alternated shades of green and blue. This lasted half an hour and disappeared. His vision continued good until 4 P. M. of the same day, when, looking at the snow or sky, he noticed a dark spot in the center of the visual field.

The spot was quite dark and about eight inches in diameter. It was round, with a piece taken off the outer side—this piece representing the position of the moon when the eclipse was last observed. It appeared as if the sun had photographed itself upon the retina.

Three days later a dull ache was felt in and around the eyes.

I first saw the patient twelve days after the accident had occurred. He then told me that the cloud had been constantly growing larger and darker. Vision on this first examination was $\frac{7}{8}$ in both eyes.

The ophthalmoscope showed no discoverable morbid change in the fundus. The disk, the vessels and the retina all appeared in normal condition.

Subcutaneous injections of strychnine, together with the use of the constant current were begun. The beneficial effects of this treatment were seen four days later, when the cloud had become less dark and impenetrable, and the outline of letters representing normal vision or $\frac{1}{10}$ could be made out within its area. Still four days later the patient returned to school and attempted to go on with his studies. This resulted in a relapse of $\frac{1}{10}$ vision and an increase of size and density of the section, with a return of the dull aching pain in the eye. April 9, $\frac{1}{10}$ vision was again reached, but the letters could only be deciphered separately after closing and resting the eyes.

April 14th $\frac{1}{11}$ could be seen clearly for three seconds.

By April 21st, in the right eye twelve seconds were counted before the cloud came, and even then $\frac{1}{10}$ could be read through it. In the left eye six seconds elapsed before the cloud developed and through it $\frac{1}{10}$ could be seen only indistinctly.

April 28th, a week later, twenty seconds in the right eye and ten seconds in the left indicated continued improvement.

May 4th, the strength of the retina had increased to twenty-eight seconds in the right eye, and at the end of that time what the patient described as a simple blur came and $\frac{1}{10}$ could be easily read through it.

May 13th, the right eye had reached forty-three seconds and the left eye twenty-five seconds and only the upper half of the test types were obscure.

At this time, owing to considerable swelling and soreness over the temples, the injections of strychnia were suspended, when the strength of the affected portions of the retina were rapidly deteriorated to thirty-two seconds in the right eye and

fifteen seconds in the left. The subcutaneous injections were again commenced, with an improvement in four days of eleven seconds in the right eye and twenty-two seconds in the left. This improvement was gradual until June 2d, when sixty-six seconds in the right eye and forty-six seconds in the left were counted before the development of the scotoma, which, at the same time, had diminished much in size and density.

At this time the patient withdrew from treatment.

The fact that this case, after several exposures, presented no discoverable pathological changes, together with the constant improvement, until sixty-six seconds were reached, during which no evidences of the scotoma were manifest, justify the conclusion that in these cases of sun-blindness the lesion may be much less serious than that indicated by Deutschmann—being rather of the nature of a paralysis than that of the disorganization of the retinal elements, and, consequently, that the prognosis as to the ultimate recovery of perfect vision is not necessarily improbable.

BOERNE BETTMAN,

113 Adams street.

Secretary.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, Oct. 5, 1885, the President, C. T. PARKES, M. D., in the chair.

OFFICIAL REPORT.

Intubation of the Larynx, with a Report of Five Cases, was the title of a paper read by Dr. F. E. WAXHAM. The paper was supplemental to one read before the Society on April 20th, in which the operation was minutely described. Dr. WAXHAM exhibited a larynx with the tube in situ. He described the manner of performing the operation, as follows, by the nurse holding the child in her lap, with the hands at the side, an

assistant firmly holding the head backward. The mouth is held open by a gag placed on the left side between the teeth. The tube, armed with a silk bridle, well waxed, is now secured to the introducing instrument. The right hand manipulates the instrument, while the index finger of the left hand guides safely and quickly the tube over the epiglottis into the larynx, when the introducing instrument is removed and the tip of the finger presses the tube well down into the larynx. We make sure the tube is in proper position by the easier breathing, the tube remaining stationary, and by coughing on the patient attempting to swallow water. The bridle of silk is apt to produce violent coughing, and is generally removed. The latest improvements in the tubes consist in an enlargement of the head of the tube with a backward curve, preventing the tube from slipping into the trachea and allowing the epiglottis to fall during the act of deglutition. There is also an enlargement in the center of the tube, allowing it to be more easily extracted. Dr. WAXHAM reported in detail five cases of croup treated by intubation. One case recovered, one died six days after intubation from pneumonia; the result of unfavorable surroundings. The other cases were not such that recovery could be definitely expected. Dr. WAXHAM then presented the history of the five cases in detail, after which Dr. H. T. BYFORD opened the discussion by saying he had the pleasure of seeing the case reported in which there was a complete recovery. In the contrast between this operation and tracheotomy there are many points in favor of intubation, and there are not many cases in which tracheotomy is indicated that intubation is not, one of its chief advantages being its simplicity. The first case of tracheotomy he had ever performed was a success and gave him a great deal of encouragement, but the next was such a terrible case, and a failure, that he was discouraged. He had

assisted at several tracheotomies, but the difficulties of the operation, the trouble of overcoming the prejudice of the parents against the operation, and the difficulties and bad results following, had caused him to *abandon the operation as of little use except in good cases. But when he saw this case, with all the absence of numerous attendants and paraphernalia* in the after-treatment, and the comfort and freedom of the patient, he was greatly astonished. The simplicity and safety of the operation and the comfort afterwards, the fact that the consent of the parents can be easily and early obtained, that failure to relieve will not bring discredit upon the physician, and that the tube opens in the throat instead of the external air, leaves no doubt in his mind that intubation, whenever it can be successfully accomplished, will supersede tracheotomy in private practice.

Dr. W. E. CASSELBERRY said he was in constant attendance on one of the cases which terminated unfavorably, but the effect from the operation was such as to convince him of its utility in many cases. In this case the former physicians in attendance had thought the patient had recovered from diphtheria, but the membrane later invaded the trachea. The young child was *in extremis mortis* and it was decided tracheotomy would be of no avail, and it was not thought intubation would be much better, but in order to give the child a chance it was done. The child lived twenty-four hours, and its last hours were comparatively comfortable. In this case there was considerable difficulty in the introduction of the tube, and it was a lesson to him that practice in introducing the tube on the cadaver might obviate many difficulties in introducing it on the living subject. In the case of this young child the tube attached to the instrument for introducing it made too short an angle to be easily introduced. The idea suggested

itself to have a joint in the introducing instrument so as to be able to easily pass the curve of the pharynx. The tube caused no cough or difficulty in swallowing, and was easily withdrawn. A German physician lately states that in 111 cases of tracheotomy under his control, 63 recovered, and an American physician notes 20 cases, of which 9 recovered. It seems from these statistics that tracheotomy is not to be discarded, but we nevertheless will find a large field for intubation of the larynx. Intubation will be preferable in young children not apt to recover from tracheotomy, in diphtheritic cases, and in cases when the friends object to tracheotomy.

Dr. R. G. BOGUE said: I have happened to have something to do with tracheotomy. While there are a great many inconveniences attending the operation and the care of the patients, subsequently, there certainly has been a good deal to commend in its performance in many cases. The number of recoveries after tracheotomy are not few. The gentleman preceding me referred to statistics showing a larger percentage of recoveries than I had happened to know. But those who have operated a goodly number of times have good reason, from its success, to resort to it in many cases. Intubation is a simple operation compared with tracheotomy, and will recommend itself in many ways, and if it proves to be of equal success in saving life, it should be used in preference to tracheotomy. Many reasons arise why it should be used. It is not a formidable operation; parent's consent to it can be easily obtained, and the relief obtained by intubation seems as great as in tracheotomy. After each tracheotomy there is a period of rest and quiet and apparent promise of success, for a period of twenty-four to thirty-six hours, then an extension of the disease into the deeper air passages, or some complication destroys the life of the patient. The benefit of intubation

with only this alleviation is apparent. It is to be hoped after a more extended trial it will prove to be of as much, if not more, service than tracheotomy, and it will commend itself to the profession.

Dr. G. C. PAOLI said Diffenbach, of Berlin, was the first to use intubation in diphtheria and croup, and a Parisian physician tried it at the time, each without the knowledge of the other's experiments. Diffenbach used an india-rubber tube, but he as well as the Parisian physician abandoned intubation. This is a different method, it is true, but it can never be recommended until we have statistics from those having great experience, in hospitals especially, to prove it preferable to tracheotomy.

Dr. D. W. GRAHAM commended the report as being an effort in the right direction. It shows that intubation has some merit, as a means of treating obstruction of the larynx, and that it is destined to become at least a partial substitute for tracheotomy in diphtheritic croup. From a theoretical standpoint it would seem that there would be some liability of these tubes causing œdema of the larynx, if retained in place any length of time, on account of the mechanical pressure on the veins of the mucous membrane. Future observation will show whether they are entirely harmless. However, there does not appear to have been any trouble in this respect in the cases reported.

If this method should become established and recognized, as it now promises, it would and ought to be counted as a new procedure, notwithstanding what Dr. PAOLI has said about the efforts of the older surgeons to put the same idea into practice, for whatever has been attempted heretofore in this direction has proved fruitless.

Dr. WAXHAM, in closing the discussion, in answer to various

questions, said the longest time the tube was worn continuously was six days. Dr. O'DWYER reports two cases, terminating favorably, in which the tubes had been worn ten days. He never found any œdema of the larynx caused by the wearing of the tube. In very young children it is necessary to remove and cleanse the tube. Older children, if not exhausted by disease, will expectorate freely. The previous attempts at intubation in France were not successful, but they were not according to the methods now employed. TROUSSEAU discouraged intubation, and thus the French physicians were influenced against it. The tubes must be thin, but their weight is unimportant. He had never found it necessary to use cocaine in introducing the tube, as this operation is generally easily and quickly done.

Laparotomy in a Case of Gun-shot Wound of the Intestines was the title of a paper read by Dr. AUGUSTUS V. PARK. He said: M. S., a butcher-boy, aged 16, of slight stature, formerly in poor but lately in good health, was shot on September 1st, 1885, at 3:30 P. M. A pistol ball, of calibre 22, fired from a distance of forty-five feet, entered the abdomen at a point midway between the symphysis pubis and umbilicus, two inches to the left of the median line. The patient was removed in a farmer's spring wagon from the place where he was shot to his home, a distance of seven miles. A dressing was applied, and at 1 P. M., the next day, he was taken to the Michael Reese Hospital. The patient arrived nearly exhausted; his temperature was 100° F., pulse 130, weak and intermitting. His respirations were 30, his abdomen tympanitic especially high on left side. There was no liver dullness, giving rise to a theory that the liver was crowded upward by extravasated blood. At 1:30 P. M. laparotomy was performed, the incision being made directly over the seat of the wound. We could not find any

wound of the peritoneum, or where the ball passed through it. As the peritoneum was opened, decomposed blood rushed through the opening with great force. Blood and blood-clots which quickly formed were removed with sponges; the intestines were drawn out and examined for wounds. The first wound found was an abrasion, the ball not having entered the intestine. There was but little hemorrhage, and the wound was closed by the interrupted cat-gut suture. The second wound, half inch in diameter, opened directly into the intestine. A small mesenteric artery was found divided and tied. All hemorrhage ceased. The wound was closed by interrupted suture; no further injury could be detected. The abdominal cavity was cleansed with one per cent. solution of carbolic acid; the intestines were washed, carefully examined and returned. The abdominal incision was closed by two sets of sutures, the peritoneal surfaces were approximated and closed by continuous suture.

At 5:30 on the morning after the operation the patient died. Seven hours later an autopsy revealed commencing peritonitis, the small intestines being apparently agglutinated together. A few blood-clots and a quantity of extravasated blood were found in the peritoneal cavity on the left side. A contused wound of the rectum was found near the sigmoid flexure, the ball being deflected from this position into the muscular tissue below, where it was found imbedded. This case justifies the opinion of various eminent surgeons that we cannot tell the direction the bullet takes from the position of the wound of entrance, or exit. From the conditions existing in this case, he was of the opinion the case would have terminated favorably had he been able to perform, with antiseptic precautions, laparotomy immediately after the injury.

Dr. F. E. WAXHAM said Dr. PARK was entitled to a great deal of credit for presenting to the Society his paper and the specimen, because it is the report of a case which terminated unfavorably. He thought the chances of the patient would have been better if he had been allowed more quiet. His frequent removals must have loosened the blood clots and increased the hemorrhage and prolonged the shock. If he had recovered he would have thought it almost miraculous, for it is one of the maxims of abdominal surgery to have complete and perfect quietude for the patient.

Dr. R. TILLEY said the study of gun-shot wounds of the abdomen is interesting to every member of the profession, no matter in what particular direction his favorite studies may lead. Any one of us may find ourselves confronted with the responsibility associated with such cases when delay in action may be culpable. Relative to the case before us, he should not only not consider a recovery miraculous, but deem the conditions associated with it more favorable than, on the average, can be expected. One of the conclusions formulated by our President before the American Medical Association in Washington in 1884 is, in opening the abdomen to look for gun-shot wounds, the incision should be in the median line, regardless of the bullet wound. This procedure certainly facilitates efficient inspection, but in the present case it was ignored. He regretted that the cause of failure of the operation has not been thrown into stronger relief, and he felt like asking our President, Dr. C. T. PARKES, to formulate the lessons he would draw from the failure of this operation. Of course, the case will go on record as one of operation after gun-shot wound of the abdomen associated with failure, and will tend to develop hesitation in the mind of the general practitioner about a class of cases which, in his opinion, called for urgent, prompt operating.

Dr. BOGUE said there were a few lessons to be learned from this case. One is the advantage which would follow an early operation, before the blood, or fluid in the abdominal cavity, decomposes. An operation should be made before the irritation from this source is severe. Another lesson is the necessity of a thorough exploration of the abdominal cavity for the purpose of discovering and removing any foreign substance which may be in it. It is necessary to control hemorrhage, by opening the abdomen and having free access to every part of it.

Dr. J. H. ETHERIDGE said that it will be noticed the pulse-rate was high after the operation, which lasted two hours. The question arises, if we cannot account for death on the opinion that it was due to the action of the ether on the cardiac nervous system. Was there acute poisoning from ether? Or was death caused by septicæmia? He wished to thank Dr. PARK for the report of this case, because it is from the reporting of these unsuccessful cases we obtain the most benefit. He did not believe it would deter any one from doing abdominal surgery, as it had already taken such a rank that the report of one unsuccessful case would not intimidate any surgeon, but enable him to steer clear of difficulties others may have encountered.

The President said: Your chairman feels somewhat diffident about making any remarks, because his experience in connection with gun-shot wounds of the abdomen, was solely in connection with the results of experiments upon the lower animals.

There is one fact demonstrated by this case, and it stands out in all the cases, of which I know, operated upon in man, which corroborates the results of the experiments made by myself, and that is, the necessity of free incision through the

median line of the abdomen, without any reference to the course of the bullet, as the best way to get at the injury so as to determine its extent, and to apply the means of repair as well as to secure a clean abdomen. Another item mentioned in the case is the one that blood flowed freely from the bullet wound while the patient was in the erect position and ceased when he was recumbent. As the bullet passed through parts of little vascularity, this item points to the wounding of some large vessel internally (as was found), and becomes a point of value in the question of perforation. This question of perforation is no easy one to settle positively, even in the best of hands. I am inclined to agree with Dr. WAXHAM in the opinion that it was not the best plan to remove the patient from his home before operating, notwithstanding his bad surroundings. We must take into consideration the fact that his patient was accustomed to his surroundings, and far less likely to be harmfully affected by them than by the danger incidental to the jolting movements of removal.

Some of the accidents of the case I am sure would have been avoided by obeying the rule of open incision in the median line. Post mortem showed considerable old blood in the cavity; this would have been found and removed. The paper states no extravasation of bowel contents was noticed; the non-existence of such condition has doubt thrown upon it by the condition found in post mortem. The wound in the rectum would have been discovered, and the action of the bowel displayed shows an untouched perforation of its walls; probably the wound of entrance of the bullet. The exit wound is sewed up.

The manner of closing the external incision as well as the bowel wounds should be such as to *save time* in the operation, by using the continuous cat-gut suture for small bowel

wounds and single through and through suture of the abdominal incision. It is pure waste of time to unite the latter in layers.

It is a matter of some pride and great pleasure to me to know that the principles enunciated by me as the results of experiments on the lower animals (especially as they are ridiculed by some) have so recently been put to a severe but successful application upon the human body. Dr. BULL, of New York, had a successful case of nine perforations, and Dr. J. B. HAMILTON, of Washington, D. C., also a successful case with eleven perforations.

In Dr. HAMILTON's case, the only bad happening arose from the formation of a blood tumor—probably, as Dr. HAMILTON says, forming from a grazed surface, the bleeding from which could not be controlled. This was subsequently opened through the rectum and the patient recovered. But it is interesting to notice that the patient was in greater danger of his life from this mass of blood than from the wounds in the intestine after they had been closed. It shows also how necessary it is to prevent bleeding by securing, if possible, all bleeding points.

After the pathological specimen was examined the Society adjourned.

TRANSACTIONS OF THE CHICAGO GYNÆCOLOGICAL SOCIETY.

Annual Meeting, Friday evening, 16th October, 1885. The PRESIDENT, DR. H. P. MERRIMAN in the chair.

The following reports were read:

I. REPORT OF THE SECRETARY.

TO THE FELLOWS OF THE CHICAGO GYNÆCOLOGICAL SOCIETY.

Gentlemen: Summary of work of the SOCIETY for the sixth year, ending September 22nd, 1885.

There have been eleven regular meetings held, at which the average attendance has been eleven.

The following communications have been made to the Society:

1. Address by the RETIRING PRESIDENT, DR. A. REEVES JACKSON, on THE REQUIREMENTS AND GENERAL OUTLOOK OF THE SOCIETY.

2. THE GENERAL SUBJECT OF ABORTION, by Dr. Edward Warren Sawyer.

3. TWO CASES OF INTERSTITIAL PREGNANCY, with exhibition of the specimens, by Dr. W. H. Byford.

4. REPORT OF AN INTERESTING CASE OF DOUBLE OVARIOTOMY, by Dr. E. C. Dudley.

5. DR. CHRISTIAN FENGER'S REPORT ON DR. W. H. BYFORD'S TWO CASES OF MURAL PREGNANCY.

6. INTRA-MURAL LEIO-MYOMA, specimen presented by Dr. E. C. Dudley.

7. THE FUNCTIONS OF THE MEMBRANES IN LABOUR, by Dr. Henry T. Byford.

8. THE INFLUENCE OF CIMICIFUGA RACEMOSA UPON PARTURITION, by Dr. J. Suydam Knox.

9. SOME REMARKS ON THE VALUE OF PERMANGANATE OF POTASH IN AMENORRHŒA, by Dr. Edward J. Doering.

10. CHRONIC PERI-UTERINE ABSCESS, by Dr. C. Fenger.

11. REMARKS UPON A TERATOM, with exhibition of specimen, by Dr. W. W. Jaggard.

12. TWO UNUSUAL CASES IN OBSTETRICS, by Dr. Charles Caldwell.

13. THE NORMAL POSITION OF THE UTERUS AND ITS RELATION TO THE OTHER PELVIC ORGANS, by Dr. Franklin H. Martin.

14. A REPORT OF A CASE OF A FŒTUS, ENCLOSED IN ITS SISTER'S PLACENTA, by Dr. James H. Etheridge.

15. EXHIBITION OF A PLACENTA WITH CALCAREOUS DEPOSITS, by Dr. James H. Etheridge.

16. REPORT OF A CASE OF LEIO-MYOMA OF THE VAGINA AND UTERUS, by Dr. Henry T. Byford.

17. SHOCK AND NERVOUS INFLUENCE IN PARTURITION, by Dr. H. P. Newman.

18. DIET AND MANAGEMENT OF ARTIFICIALLY FED INFANTS, by Dr. A. H. Foster.

19. ABDOMINAL AND GYNÆCOLOGICAL SURGERY IN ENGLAND, SCOTLAND AND HEIDELBERG, by Dr. E. C. Dudley.

At the July meeting the constitution was duly amended, changing the limit of membership from 20 to 25.

Upon ballot, the name of one Fellow was removed from the roll.

Six new Fellows have been elected.

Total membership, 22.

At the meeting in March, it was voted by the Society to issue a certificate of membership to each Fellow of the Society, which has been duly executed.

The Secretary cannot terminate this, his fifth annual report to this honorable body, without congratulating the Fellows upon the advancement made; surely no other year of its existence has been marked by a greater degree of advancement. This he believes no less due to the constant and efficient service of the President than to the excellent and faithful reports of the Society's Editor.

Respectfully submitted,

EDWARD WARREN SAWYER, M. D.,

Secretary.

II. REPORT OF THE EDITOR.

TO THE FELLOWS OF THE CHICAGO GYNECOLOGICAL SOCIETY.

Gentlemen: The editor begs permission to submit the fol-

lowing report for the year ending Friday evening, 16th Oct., 1885.

Copies of the proceedings of each meeting of the CHICAGO GYNECOLOGICAL SOCIETY, with the exception of that of 19th April, have been, or will be, sent to the following medical journals:

1. PHILADELPHIA:

The Medical News.

2. NEW YORK:

The American Journal of Obstetrics,

The New York Medical Journal.

3. BOSTON:

The Boston Medical and Surgical Journal.

4. BALTIMORE:

Maryland Medical Journal.

5. CINCINNATI:

The Obstetric Gazette.

6. LOUISVILLE:

The American Practitioner.

7. CHICAGO:

The Journal of the American Medical Association,

The Chicago Medical Journal and Examiner.

8. ST. LOUIS:

The Weekly Medical Review.

9. NEW ORLEANS:

New Orleans Medical and Surgical Journal.

10. SAN FRANCISCO:

Pacific Medical and Surgical Journal.

11. LONDON:

The British Gynæcological Journal.

The editor desires to suggest the propriety of including a German and a French journal in the list.

The report of the proceedings of the meeting of the 19th April appeared only in the CHICAGO MEDICAL JOURNAL AND EXAMINER, the official organ of the SOCIETY, for the reason that DR. FENGER subsequently presented the same subject,—Chronic Peri-uterine Abscess,—before the SECTION on OBSTETRICS, AMERICAN MEDICAL ASSOCIATION, at the annual meeting in New Orleans.

During the year, two formal complaints, with reference to the accuracy of the reports of the transactions, have come to the editor's knowledge.

The first complaint,—a serious misrepresentation,—was sent to the editor in conformity with the dictates of courtesy and parliamentary usage. The correction was at once transmitted to the editor of the *American Journal of Obstetrics* and appeared in the September number of that periodical.

The second complaint,—an alleged misrepresentation,—was sent directly to the editor of the *American Journal of Obstetrics*. As the well-known rule, with reference to the transmission of corrections was disregarded in this case, the complainant's communication was referred by DR. MUNDÉ to the SOCIETY's editor. Correspondence ensued. The SOCIETY's editor stated that he was under the conviction that the complainant actually uttered the words printed in the the report of the transactions. DR. MUNDÉ accordingly refused to print the alleged correction.

The editor desires to call attention to the subject for the reason that such complaints seriously affect the value of the reports of the transactions in the eyes of medical journalists, and will limit their circulation.

The relation of the reporter to the debater in any society is a purely impersonal one. Inobservance of the conventions, naturally suggested by courtesy and good breeding, upon the part of any member towards the reporter, ought never to be

regarded as a personal matter. Nor does the editor, in the present instance, construe any unpleasant occurrence during the year in the light of a personal offence.

It is certainly a very trying matter to see one's remarks emasculated, distorted beyond all recognition, utterly senseless, widely circulated in the medical journals. When such misrepresentation is due to the carelessness, stupidity or perversity of the scribe, he deserves to be censured. As a matter of fact, he usually comes in for a full share of vituperation, whether merited or not. But the fault is not always the reporter's. The debater, himself, may sometimes be in error.

In all discussions there is much desultory and irrelevant talk. Debaters are usually prodigal in the use of words. Only masters of the art "skim over a multitude of circumstances under which the occurrence has taken place, because they are aware that it is proper to reject what is only accessory to the object which they would present in prominence." A peculiar involuntary association of ideas is not infrequently observed. Men "are" usually "held in thralldom to the order and circumstances in which their perceptions were originally obtained." The great observer of human nature has not failed to notice this fact. "Mrs. Quickly, in reminding Falstaff of his promise of marriage supplies a good example of this peculiarity." "Thou didst swear to me upon a parcel-gilt goblet, sitting in my Dolphin chamber, at the round table, by a sea-coal fire, upon Wednesday in Whitsun week, when the prince broke thy head for likening his father to a singing man of Windsor,"—and so forth. (Sir William Hamilton.)

Medical discussions, in particular, are marred by verbosity and wandering from the subject. The debates in the *symposia* of the CHICAGO GYNÆCOLOGICAL SOCIETY, during the past year, have not been entirely free from these faults.

Remarks, made in the heat of discussion, are not always characterized by accuracy of statement. A short time since, an American gynæcologist, — as universally beloved for personal qualities as he is famed for professional skill, — made the remarkable assertion that he had observed several cases of epithelioma of the *glans penis* result from copulation with women whose cervixes were the seat of carcinoma. A mortifying retraction of the statement followed, and the heat of discussion was urged in palliation.

Ideas are not always expressed *clearly, distinctly, and adequately*. Notions are frequently *obscure* and *confused*. That celebrated mathematician and philosopher, LEIBNITZ, published a small treatise in 1684 on the *necessary characters* of PERFECT KNOWLEDGE. MR. BATNES has appended to his translation of the *Port Royal Logic* an excellent translation of LEIBNITZ's tract. A study of this translation, by the FELLOWS of the SOCIETY, would materially ease the reporter's shoulders of his load. Then there exists in the minds of many medical gentlemen a supreme contempt for the science of the formal or necessary laws of thought. It is the inalienable right of every American citizen to think and talk as it pleases him ! America is a big, rich, free, powerful country. The American medical mind evinces a natural fondness for the universal proposition, affirmative or negative. Major premise, minor premise, and conclusion, are frequently combined in utter defiance of the laws of the syllogism. Fallacies, — logical and material, — exceed, in number and degree, those described by such systematic writers as SIR WILLIAM HAMILTON and JOHN STUART MILL.

The "accidence" and syntax" of English grammar is not always observed, and DR. CAMPBELL's canons are sometimes held in derision.

It is by no means an easy task to construct out of such an incongruous mass of materials a clear, distinct, concise report, which will reflect credit upon the participants in the debate, and, at the same time, truthfully represent the discussion.

In order to secure the fairest possible representation of each debater, the following plan, with reference to the reports of the transactions, has been pursued in the last two meetings. The FELLOWS were requested to send *résûmés* of their remarks to the editor, within one week after the meeting.

These condensed statements have been printed as written by the speakers themselves.

The remarks of the gentlemen who failed to comply with this request have been omitted.

This plan is manifestly imperfect, and will not furnish an accurate record of the proceedings. Memory is proverbially treacherous. At home, in the library, away from the heat of discussion, statements will be modified, retracted, and the whole tenor of the discourse radically altered. The plan, however, is designed to conciliate the FELLOWS, and thus promote the welfare of the SOCIETY.

The editor desires to suggest the propriety of the appointment of a Committee on Publication, in addition to the reporter. The reports, revised and signed by the editor and Committee on Publication, will thus constitute official documents, beyond which there is no appeal.

In conclusion, the editor desires to gratefully acknowledge the charity with which, in general, the FELLOWS of the SOCIETY have judged his reports.

Respectfully submitted,

W. W. JAGGARD, M. D.,

Editor.

III. THE ADDRESS OF THE PRESIDENT, DR. H. P. MERRIMAN.
TO THE FELLOWS OF THE CHICAGO GYNÆCOLOGICAL SOCIETY.

Gentlemen: At this our annual meeting, it seems appropriate to cast our eyes backward upon the meetings of the year past, to see how faithful we have been and what we have accomplished. Such a review is always profitable, as it tells us where we stand, and what we may expect the future to bring to us.

I think myself peculiarly fortunate in having had for my predecessors in the presidency far-seeing, thoughtful men, who have built so wisely that our SOCIETY grows stronger and more vigorous from year to year. You all remember the wise words uttered a year ago by the retiring president, advising the course which the Society has pursued this year, and which has proved so advantageous. During the past year no meeting has failed. Even in that worst of snow-storms, when the street cars did not run, we had a well-attended and instructive meeting at the residence of DR. DUDLEY. The interest of the members has been shown not only in their attendance, but there has been no lack in the papers read. Every evening we have had one and sometimes two papers, with a profitable discussion upon each; and a constantly increasing interest has been shown by the Fellows in preparing themselves for the discussions, by studying up the subjects announced for each evening. The vote that the meetings should be continued late into the summer also shows the interest of our Fellows. We have frequently had invited guests, who have expressed a thorough appreciation of the earnest work of our Society.

I feel, gentlemen, that we can congratulate ourselves upon a successful year; and it is but fair that the credit should be awarded where it belongs. All have worked well, but to our secretary is due a large share of the credit for the past year's success. He has been indefatigable in getting contributions

of interest from the Fellows, to say nothing of his promptness in sending notices to the members of our meetings, and of his assistance to each entertainer in arranging those little matters of refreshment which add so much to our intellectual enjoyment. Another and most effective agency has been the excellent reports our editor has made of the work of the Society. They have been promptly printed, not only in our own city, but also in the leading cities of our country, and lately even in London and Paris. I feel that to Dr. Jaggard, more, perhaps, than to any other one person, is due the success of the Society this year. These two offices,—of Secretary and Editor,—are of the greatest usefulness to the Society. It is important that they be well filled, and I do not see how we can improve the present occupancy.

I do not desire to make a report upon the progress of gynecology, and there is not time if I did wish it; but I cannot avoid a feeling of amazement and admiration at the rapid growth of knowledge in this department of medicine. One subject after another has been taken up and investigated: every year adding greatly to our knowledge of the nature of the disorders and the methods of relieving them. Surgery, especially, has made gigantic strides. New methods and greater skill have reduced the mortality in the capital operations to such a minimum, particularly in ovariectomy, that the belief is rapidly gaining foothold that abdominal surgery, even in the male, should be performed by the ovariectomist. The operations upon the perineum, the vagina, the cervix and the vesicovaginal septum are now nearly perfect. Gynecology owes almost everything to surgery, and surgeons are to-day doing the best work done in elucidating the pathology and treatment of diseases of the pelvic organs. There is, however, danger of our thinking that only a surgeon can do anything

for the relief of woman's diseases. All honor to surgeons. It seems to me, however, that there is a large field for investigation and profit in diseases of women that are not surgical; that all the sufferings of women are not due to textural changes in their reproductive organs. These parts are so abundantly supplied with nerves and vessels,—are so closely connected with both the sympathetic and spinal nervous systems, that they act as excitants and recipients of suffering. No organs in the body are more subject to sympathetic or reflex influence, or feel more keenly any influence brought to bear upon them. Fatigue, exposure, debility, depressing emotions, disordered blood states, constitutional *cachexias*, or the various diatheses are sure to have their influence on these important organs in the way of producing suffering which cannot be relieved by surgery. These subjects ought to receive more attention. The neuroses of the pelvis have not been sufficiently studied. Uterine and ovarian neuralgia are still vague terms. We do not know when dysmenorrhœa is due, and when not due, to textural change in the ovaries. For this painful complaint women have been deprived of these organs and no disease could be found in them. This is like extracting sound teeth for *tic-douloureux*. Cannot our Fellows the coming year bring forward some additional light upon these obscure neuroses? Then, how little we know of sterility and its cure. We see certain surgical defects that may be remedied, but there is room for immense improvement in this subject. The subject of functional diseases, too, is not half understood. Turn where we will, opportunities offer for earnest work, and I trust they will be improved the coming year more than at any time in the past.

As I see the work we *have* done, I realize what we *may* do, and I desire to have our SOCIETY take such a stand and have

such an influence that *one* of the proudest titles any one of us can append to his name will be "Fellow of the Chicago Gynæcological Society."

IV. ELECTION OF OFFICERS.

The following officers were elected for the year 1885-6.

PRESIDENT, Dr. Daniel T. Nelson.

FIRST VICE-PRESIDENT, Dr. Henry T. Byford.

SECOND VICE-PRESIDENT, Dr. Charles Warrington Earle.

SECRETARY and TREASURER, Dr. Edward Warren Sawyer.

EDITOR, Dr. W. W. Jaggard,

V. BANQUET.

The Fellows were then entertained at an elaborate banquet in the Calumet Club, by the retiring PRESIDENT, DR. H. P. MERRIMAN.

W. W. JAGGARD, M. D.,

Editor.

2330 Indiana Ave., 27th October, 1885.

BOOK REVIEWS.

OHRENHEILKUNDE. *von* DR. A. SARROU.

The writer's very natural object is to impress the general practitioner with the importance of his subject. To this end he speaks of the frequency of ear trouble. He mentions an examination of 6,000 school children, in whom inspissated cerumen, a retraction, or calcareous infiltration of the drum-head, was found in 22 per cent. of the boys, and 23 per cent. of the girls. He further quotes Schwartz as finding, in autopsy, a creamy or green-yellow fluid in the labyrinth, tympanum, etc., in 40 per cent. of all the children examined. He emphasizes the slightness of the barriers everywhere existing between the ear and the interior of the skull. There are enough possible disastrous results, he thinks, from a suppurative otitis externa, to bring otorrhœa from the province of the specialist into that of the general practitioner. He alludes to a class of cases where an otorrhœa, causing only moderate deafness, is allowed to run on for years, until finally it develops a brain-trouble, and the patient dies suddenly of "Heart Disease," or some other convenient diagnostic scape-goat. He quotes Wilde: "So long as otorrhœa is present, we can never tell how, when, or where it will end."

Some of his suggestions on diagnosis are very good. He warns the physician against setting down as Menière's disease every ear trouble with vertigo. He thinks this symptom is possible in any pathological condition of the ear. He calls

attention to the fact that the muscles of the tube regulate the ventilation of the tympanum, and that, through general debility, or exhaustion from any cause, there may result, from the inactivity of these muscles, a closure of the Eustachian tube with tympanic catarrh, retraction of the drum-head, and a considerable degree of deafness,—while the catheter finds the tube pervious, and, apparently, in a normal condition. The diagnosis of many a vague case of “rheumatism” of the neck, with occasional fever and peculiar pains extending towards the occiput, might, he thinks, be cleared up, if the physician remembered the possibility of caries of the bones of the ear. He mentions the striking similarity between the symptoms of phlebitis with the etiology of suppurative otitis, and those of a beginning typhoid fever. Under the head of thrombosis, he speaks of one symptom which he has never seen described, but which, he believes, is seldom lacking, viz., the bronze discoloration of the skin,—which symptom he has seen twice lead to a wrong diagnosis of morbus Addisonii. The conjunctiva was normal. The methods he recommends for localizing the cause of deafness are especially good. He emphasizes the value of the large tuning fork, with Politzer’s modifications, by which the over-tones are avoided, and the scale can be raised or lowered at will. By this means it can be determined whether the difficulty in hearing is in the high or low notes. He quotes Moos, who holds that in chronic middle-ear catarrh, the power to hear high notes is impaired; while in affections of the special nerve-apparatus, the perception of the middle notes is disturbed. If the higher of these middle notes cannot be heard, the lower spiral is diseased; otherwise, the upper spiral.

In treatment, Dr. Sarrou’s governing principle seems to be, as in one place he quotes, “Primum est non nocere.” As an

air-douche, he prefers Politzer's bag. He describes a complicated apparatus, somewhat resembling Waldenburg's compressed air cylinders, for equalizing and increasing the pressure of the air; "but," he remarks, "while such an apparatus would form an imposing addition in a consultation-room, too great pressure has cost more than one patient his life, and here, also, the old proverb holds true,—that the most skillful physician finds his best instrument in an intelligently guided hand." He denounces Valsalva's method, especially where there is an atheromatous condition of the arteries, as causing an intense hyperæmia of the whole head. In this connection he gives a practical suggestion on the right use of the handkerchief. He considers "*Schneützen à la paysan*"—if it be allowed to so mingle languages,—as the truly physiological way; *i. e.*, under cover of the handkerchief, closing each nostril in turn, and by a forcible expiration, expelling the mucus from the free aperture. For suppurative otitis externa, he blows in dry boracic acid, and uses absorbing cotton, dry, instead of syringing. In middle-ear catarrh, he advises paracentesis, as soon as perforation threatens; or where this is impracticable, as in small children, he finds Politzer's air-douche often of great benefit. In scarlet fever and diphtheria, he keeps absorbent cotton, soaked in a 10 per cent. solution of salicylic acid, in the external meatus, as well as in the nose.

In cases of cicatricial contraction of the Eustachian tube, he describes a very delicate operation for keeping open the incision in the membrane. It consists in dissecting off a triangular piece, from the outer layer of the drum-head, and inserting this into the opening. However, as there is a large element of chance in this, he does not recommend it, but suggests the simple device, for counteracting the retraction of the membrane, of keeping oil-soaked absorbing cotton in the external meatus.

He mentions the troublesome *tinnitus aurium* resulting from the use of cocaine, in many cases, which fact, he thinks, will prevent its ever becoming very popular in the treatment of ear-diseases.

The writer makes no claim to originality, but simply desires his book to be of use. It seems probable that no physician will read it through without feeling that the writer's aim has been realized.

H. H. C.

APPLIED MEDICAL CHEMISTRY. By LAWRENCE WOLFF, M. D.
8vo., pp 174. Philadelphia: P. BLAKISTON SON & CO.;
Chicago: W. T. KEENER.

It would be hard to tell what motives influenced the author in writing this book. In the preface it is stated that he wished to present certain matters in a simple and concise manner, but as the body of the work shows scarcely a trace of this *conciseness* or *simplicity*, one is inclined to think he must have forgotten this in following some other object. What this other object is, one fails to learn on a close examination.

A student beginning chemistry would certainly find great difficulty in understanding many of the author's explanations, as they are frequently made in most barbarous and unscientific English, and at times are even lacking in accuracy. As illustrations of obscure and careless English, the reader may refer to page 14, under the head of "Specific Gravity," to page 31, under "Stoichiometry," and to page 83, under "Alcohols." From the title page it appears that the author is a member of several learned societies and an instructor in an Eastern medical college. In addition to all this, it must now be said he has written a book.

J. H. L.

A TEXT-BOOK OF MEDICAL CHEMISTRY. *By* E. H. BARTLEY, M. D. *12mo., pp. 376. Philadelphia: P. BLAKISTON SON & CO.; Chicago: W. T. KEENER.*

PROFESSOR BARTLEY, the well-known chemist of Brooklyn, has given us here an excellent work, accurate and well arranged.

He evidently appreciates the needs of medical students, and he has written a text-book which deserves attention at the hands of teachers. There was a time when chemistry was a mere "side-show" in a medical college, and anything would do as a text-book; but modern methods are obtaining a hearing here as elsewhere, and the large number of medical chemistries afforded to students attest the efforts made in this direction. Professor Bartley's book is certainly one of the best of these.

J. H. L.

NEWS ITEMS.

RUSH MEDICAL COLLEGE.—The winter session of the RUSH MEDICAL COLLEGE commenced on Tuesday evening, 22nd September, with an introductory address upon the subject of "Personal Identity," by PROFESSOR DE LASKIE MILLER. The term opened with 354 matriculates. The total number of students, registered at the present time, is 406.

CHICAGO MEDICAL COLLEGE.—PROFESSOR JOHN H. HOLLISTER delivered the introductory address at the opening of the winter term of the CHICAGO MEDICAL COLLEGE, Tuesday evening, 22nd September. PROFESSOR HOLLISTER sketched

the life and labors of LOUIS PASTEUR in terse, epigrammatic sentences.

During the absence of DR. FRANK BILLINGS in Europe, DR. ELBERT WING will deliver the course of lectures on physical diagnosis. DR. WING has recently returned from Vienna.

The total number of students, registered up to the present time, is 120.

COLLEGE OF PHYSICIANS AND SURGEONS.—The session of the COLLEGE OF PHYSICIANS AND SURGEONS OF CHICAGO, for 1885-6, was opened on Friday evening, 25th September, with an introductory address on the subject of medical ethics and the code question, by PROFESSOR OSCAR A. KING.

DR. CHRISTIAN FENGER has been elected Professor of Clinical Surgery. DR. N. SENN occupies the chair of Principles and Practice of Surgery and Clinical Surgery. MR. C. B. GIBSON has been chosen Professor of Inorganic Chemistry. DR. C. A. KELSEY has received the chair of General Pathology and Pathological Anatomy. DR. F. B. EARLE has been appointed Curator of the Museum, and DR. B. W. ROGERS Assistant Demonstrator of Anatomy.

The following resignations from the faculty have been received and accepted: DR. F. B. E. BOCKIUS, chair of Medical Jurisprudence; DR. W. A. TOHN, chair of Inorganic Chemistry; DR. J. J. M. ANGEAR, chair of the Principles of Medicine.

A College Hospital has been opened in the College building, and has proved a great success. Twenty beds are now occupied, and the Hospital Committee is about to add additional wards. Fifty beds will be the maximum capacity of the Hospital.

The total number of students in attendance at the present time is 160. The senior class has 65 members.

DR. CHARLES GILMAN SMITH has been elected Orator for 1886 by the ALUMNI ASSOCIATION of the MEDICAL DEPARTMENT of the UNIVERSITY of PENNSYLVANIA. DR. SMITH is a member of the Class of 1851.

COOK COUNTY HOSPITAL.—The investigation by the Hospital Committee of the County Board into the recently preferred charges of neglect of patients by the resident and visiting physicians at the COOK COUNTY HOSPITAL commenced Wednesday afternoon, 28th October. Doctors Adams, Hutchins, Robinson, Mitchell, Streeter, Tooker, Sherry, Burnside, McWilliams, Bridge, Caldwell, Rowan, St. John, Jacobson, Pratt, Holmes, and Dr. Andrews of Mercy Hospital were present. Commissioners Leyden, Hannigan, Lynn, Klehm, McCarthy, Senne, Nieson, McClaughrey, Ochs, and Van Pelt represented the Hospital Committee.

The investigation was instigated by charges of neglect, preferred by a female patient, suffering from necrosis of certain of the cranial bones, which was complicated by an abscess under the scalp, from which there was a continuous discharge of pus.

After the history of the patient's condition, prior to admission into the County Hospital, had been clearly narrated by Dr. Andrews, of Mercy Hospital, certain members of the Hospital Committee worked themselves up into a state of righteous fury without inquiring into the merits of the case. The lie direct was given and returned with the utmost prodigality in the matter of expletives, and the Committee adjourned in confusion.

During the meeting, Warden McGarigle made an interesting statement with reference to the obstetrical department, which, we are reliably informed, is true. During the past year three

hundred and twenty-nine pregnant women have been received. Two hundred and fifty-eight births have occurred with only one maternal death.

The cost of supporting patients at the Cook County Hospital is seventy-six cents *per diem, per caput*,—less than in any other similar institution in the country.

The buildings, belonging to the County Hospital, are new, commodious, and supposed to be constructed in accordance with modern principle of hospital architecture.

The Resident Staff is annually selected with great care by competitive examination. The Visiting Staff includes certain physicians and surgeons, whose reputation is national. The nurses are supplied by the Cook County Training School. It is not necessary to speak of the merits of this institution to medical practitioners. Every one concedes that it is one of the most efficient organization of its kind in the United States.

Notwithstanding these facts, the Cook County Hospital is a political machine. Abuses in the management have been frequently detected.

It would not be a difficult matter to eliminate the factor, which has up to the present time handicapped the strenuous efforts of the medical attendants. A similar state of affairs recently existed in Blockley Hospital, attached to the Philadelphia almshouse.

The Committee of One-hundred effected a radical change by the ejection of the Board of Managers. The duty of the Citizen's Association of Chicago is apparent.

OBITUARY.

DR. JOHN L. ATLEE died at his residence in Lancaster, Pennsylvania, on October 1st, at the advanced age of eighty-five years. Until about one year ago he enjoyed exceptional mental and physical vigor for his period of life. He was engaged in the active practice of his profession for over sixty years. He was an Ex-President of the American Medical Association. During his long and eventful life he filled many positions of responsibility with ability and scrupulous fidelity. He left one son surviving him, DR. WALTER L. ATLEE, of Philadelphia.

PROFESSOR RICHARD McSHERRY, M. D., died at his residence in Baltimore, Maryland, on October 7th, 1885. In early life he had been an assistant-surgeon in the United States Army, from which he resigned in 1843. He then entered the United States Navy as an assistant-surgeon, and remained until 1851, when he resigned his commission. Subsequently he located in Baltimore, and, for many years, he has been known as one of the most prominent members of the medical profession of that city. He was sixty-eight years of age.

EXTRACTS AND ABSTRACTS.

TYROTOXICON,—CHEESE POISON. ABSTRACT OF A PAPER BY
PROFESSOR VICTOR C. VAUGHAN, M. D., PH. D.

At a meeting of the Michigan State Board of Health, July 14, 1885, Professor Vaughan presented a report of his investigations on poisonous cheese. It is well known that cases of severe illness follow the eating of some cheese. Such instances are of frequent occurrence in the North German countries and in the United States. In England they are less frequently observed; in France, where much cheese is made and eaten, these cases are said to occur very rarely. A few years ago, the reputation of a large cheese factory in Northern Ohio was destroyed by the great number of cases of alarming illness arising from eating its cheese. Dairymen know this cheese as "sick" cheese.

KINDS OF CHEESE THAT ARE POISONOUS.

A German author says: "The numerous kinds of soft cheese prepared in small families, or on small farms, are generally the cause of the symptoms; while it is quite exceptional to hear of symptoms arising from the use of cheese prepared in large quantities." Some two years ago a family in Alpena, Michigan, was poisoned by eating cottage cheese; but the cheese which poisoned so many in this State last year, was made at one of the largest factories in the State, and by a thoroughly experienced cheese-maker. The old, foul-smelling cheese, such as Limburger and Schweitzer, have never been known to be poisonous.

EFFECTS OF THE CHEESE.

The symptoms produced by "sick" cheese, as reported by German and American physicians, agree quite closely and are as follows: Dryness of the mouth and throat with a sense of constriction, nausea, vomiting, diarrhœa, headache, sometimes double vision, and marked nervous prostration. In rare instances the sufferer dies from collapse. As a rule, recovery occurs in a few hours, or at most after a few days. The symptoms of cheese-poisoning and those of sausage, canned-meat and fish-poisoning are very similar, though death results more frequently from the others mentioned than from cheese-poisoning.

APPEARANCE OF THE CHEESE.

The samples of poisonous cheese examined had no peculiarities of appearance, odor, or taste, by which they could be distinguished from good cheese. It is true that if two pieces of cheese—one poisonous and the other wholesome—were offered to a dog or a cat, the animal would select the good cheese. But this would be probably due to an acuteness of the sense of smell possessed by the animal and not belonging to man. Indeed, if a person tasted a cheese knowing that it was poisonous, he might detect a sharpness of taste which would not ordinarily be noticed.

HAVE WE ANY READY MEANS OF RECOGNIZING POISONOUS CHEESE.

There is no certain means, aside from a chemical examination, by which a poisonous cheese can be distinguished from a wholesome one. The most reliable ready method is probably that proposed by Professor Vaughan a year ago, and it is as follows: Press a small strip of blue litmus paper against a freshly cut surface of the cheese; if the paper is reddened instantly and intently, the cheese may be regarded with suspicion. When treated in this way any green cheese will

redden the litmus paper, but ordinarily the reddening will be produced slowly and will be slight. If the piece of cheese be dry, a small bit should be rubbed up with an equal volume of water, and the paper should then be dipped in the water. Professor Vaughan does not regard the above test as free from error, but as the most reliable and ready means now known. Every grocer should apply this test to each fresh cheese which he cuts. The depth of the reddening of the paper may be compared with that produced by cheese which is known to be wholesome.

EFFECTS ON THE LOWER ANIMALS.

Dogs and cats, at least, are not affected by eating poisonous cheese. This is probably due to the fact that they do not get enough of the poison from the amount of cheese which they eat. The pure isolated poisons in sufficient doses would undoubtedly produce upon the lower animals effects similar to those produced on man.

NATURE OF THE POISON.

Professor Vaughan has succeeded in isolating the poison, to which he has given the name tyrotoxinon (from two Greek words, which mean cheese acid poison). It is the product of slight putrefaction in the cheese, which probably occurs in the vat, as the curd has been known to poison a person. By this slight putrefaction, or excessive fermentation, as it may be called, a large amount of butyric acid is formed, and this in the presence of the casein of the cheese is capable of developing the poison. Different samples of the poisonous cheese contain different amounts of the poison. The same weight of cheese from one cake furnished three times as much poison as that from another cake. The poison was obtained in long, needle-shaped crystals, which are freely soluble in water, alcohol, chloroform and ether. The smallest visible fragment of a

crystal placed on the tongue causes a sharp, stinging pain at the point of application, and, in a few minutes, dryness and constriction of the throat. A slightly larger amount produces nausea, vomiting and diarrhœa. The poison is volatile at the temperature of boiling water, and for this reason even poisonous cheese may be eaten with impunity after being cooked. The substance has also a marked pungent odor, and through the nose one can obtain sufficient of the volatile poison to produce dryness of the throat. This is true, however, only of the isolated poison. In the cheese the taste and odor of the poison are both modified to such an extent that they would not be recognized, as has already been stated.

The first step in the study of cheese poisoning has now been taken, by finding out what the poison is. Efforts will be made to ascertain the means for preventing its formation.

EXTRA-PERITONEAL RESECTION OF THE BLADDER FOR CARCINOMA. *By G. v. AUTAL, reported in Centralblatt für Chirurgie. Translated by MARY E. BATES, M. D., of Chicago.*

The patient was a male, aet. 61. There was dysuria for two years. The urine was bloody with blood-clots for one year. There was micturition every ten to twelve minutes,—a few drops of bloody urine, followed by blood-coagula passed with great pain. Hæmorrhage from bladder was continuous, day and night, and not affected by rest or motion. The patient was emaciated and weakened. His skin was a dirty dun-color.

Combined Examination.—A tumor was found, of fist-size, apparently inserted in the summit of the bladder, with an uneven surface in the bladder-wall, which was stony hard in places, and gave the sound of stone when struck.

The bladder was freely movable. There was no infiltration of glands.

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The specific gravity of the urine was 1027. Its reaction was alkaline. Two-thirds of the sediment was coagulated blood.

Microscopical examination.—There were blood corpuscles in great numbers. There was much pus and also bladder-epithelium. No organized tissue or kidney-elements found.

Diagnosis.—*Incrusted tumor of the summit of the bladder.*—The differential diagnosis between that and stone (encapsuled) was based upon the continuance of the hæmorrhage even after many days of rest of the patient.

Operation, April 23, 1885.

After thorough disinfecting irrigation, the bladder was filled with 250 ccm. of salt water and a colpeurynter placed in the rectum.

On opening the abdominal wall the antevesical fold of peritoneum was found to extend down so far that between it and the pubes there was a space of but 1 cm. in breadth. In this space that part of the bladder uncovered by peritoneum appeared. The antevesical peritoneal fold was carefully pushed up and held, and the bladder opened by a beveled incision 4 cm. long.

Two fingers were passed through this opening, and an incrusted, friable, uneven tumor, in intimate connection with all of the coats of the bladder, was found in its summit.

Owing to its cancer-like nature, it was decided to remove the entire thickness of the bladder-wall to an extent corresponding to the base of the tumor, that is, to resect that much of the bladder.

First—The peritoneum was carefully separated from the summit, and in part from the posterior wall of the bladder, pushed up and held by an assistant.

Second—The summit was encircled and removed by an incision, so made that the edges of the bladder-wound pre-

sented the appearance of a shallow funnel. One-third of the entire bladder was removed. Seven bleeding vessels were ligated with sublimated silk ligature cut short.

Third—Toilet of the bladder and the wound was made.

Fourth—The wound of bladder was closed with sublimated silk sutures.

Fifth—Two hard rubber "knee"-shaped tubes were placed in the lower angle of the wound, through which the bladder was to be continually irrigated with a solution of thymol.

Sixth—The abdominal wound was closed by sublimated silk sutures, except at the lower angle.

On the 6th day, irrigation was stopped; a Nélaton catheter was introduced into the bladder *per urethram*, and a long drainage tube through the abdominal wound. The greater part of the urine escaped through this wound. On the 12th day the drainage tube was removed. The granulations around the fistula-opening were curetted, and by June 17 the opening had closed completely. The convalescence was fever-free. The patient was much improved he could retain his urine for three or four hours. It was no longer bloody.

The bladder-capacity, 200 to 300 ccm.

NOTE.—According to v. Aulst. there have been but two partial resections of the bladder made. The first by Sonnenburg who resected two-thirds of the bladder, including the peritoneal covering, and closing the remaining part of the bladder by uniting it with the edges of the peritoneal wound. The patient died in four weeks, from exhaustion. The second—the case reported above—presented two modifications of Sonnenburg's operation and of similar experimental partial resections of the bladders of animals, (by Maximow, Vincent, Snamensky). The first modification, and the more important one, consisted in the separating and holding up of the peritoneal covering of

the bladder, thereby preventing the opening into the peritoneal cavity, and the consequent dangers of infection from the decaying ulcerating tumor. The second modification is the beveled-incision wound. This in the coaption of the wound, favors the prevention of infiltration of urine, especially necessary at the upper and back part, where the peritoneum has been separated from the bladder.

PARALYSIS OF THE BLADDER FROM THE USE OF CARBOLIC ACID.

Cartaz, in the *Gazette méd. de Paris*, 1884, reports interesting cases of vesical paralysis due to the use of carbolic acid in surgical dressings. This is one of the various toxic effects of the acid, and has been observed by the writer only twice, occurring in the first instance after irrigation of the uterus with a two per cent. solution of carbolic acid after abortion. The paralysis disappeared on the substitution of corrosive sublimate as a disinfectant. The second instance was met with in the case of an aged woman with a fracture of the neck of the femur. The dressings, which were daily changed, were treated with a five per cent. solution of carbolic acid. In two weeks there was enormous distension of the bladder, and for forty-eight hours the woman had not urinated. By the catheter about a quart of dark-brown urine was evacuated. In four days the paralysis disappeared, the carbolic solution having been replaced by boracic acid ointment. There appeared no reason to doubt that in each case the paralysis of the bladder was caused by the drug in question, as in both patients the urine had the colour characteristic of carbolic acid poisoning, and the symptoms of paralysis in each case disappeared on abandoning the use of the drug. Only two similar cases are reported, and in these, vesical paralysis resulted from drinking a concentrated solution of the acid.—*Centralb. für Chirurgie*, March 28, 1885.

TURPENTINE IN DIPHTHERIA.

Dr. N. Lunin, of St. Petersburg, in a recent contribution to the *Med. Wochensch.*, presents the results of a study of two hundred and ninety-six cases of diphtheria, classified, with reference to treatment, into the fibrinous and the phlegmonous-septic forms. The treatment of the first form with corrosive sublimate, iron and chinolin resulted in a death-rate of 30, 32 and 31 per cent., respectively. The administration of oil of turpentine in ten-drop doses every hour was followed by the recovery of 91 per cent. of twenty-three cases. In the phlegmonous-septic form the mortality was slightly less under the iron treatment. His tables indicate an average death-rate of 55.3 per cent., and will no doubt disgust a large number of medical practitioners and bacteriologists who are happy in the belief that they have found a specific for diphtheria.

DR. EDWARD N. LIELL reports, *New York Medical Journal*, September 19th, an interesting case of caffeine poisoning. The condition of the patient is thus described: "Greatly prostrated and exhausted, semi-unconscious, cold extremities, clammy perspiration, anæsthesia and slight paresis of the muscles of both feet; temperature normal, pulse 55 and irregular, respiration irregular and 16 per minute. Under treatment by revulsives and administration, hypodermically, of $\frac{1}{50}$ gr. atropin sulph. and diffusible stimulants, prompt improvement was effected, but the toxic effect continued for five days, characterized by abdominal pain, dimness of vision, delirium, vertigo, muscular tremors, difficulty in deglutition and speech, increased action of kidneys, frequent urination, and tetanic convulsions. The quantity taken amounted to eighteen grains within a period of an hour and a half. The treatment was successful, consisting chiefly in the employment of chloralhydrate and potassium bromide in liberal doses.

EXCHANGES RECEIVED.

American.—Atlanta Medical and Surgical Journal. American Journal of Pharmacy. American Journal of Physiology. American Journal of Obstetrics. American Medical Digest. American Practitioner. American Journal of Ophthalmology. American Journal of Insanity. New York Medical Journal. American Journal of the Medical Sciences. American Journal of Dental Science. Archives of Pediatrics. Annals of Surgery. Analectic Medical Monthly. The Alienist and Neurologist. Buffalo Medical and Surgical Journal. Boston Medical and Surgical Journal. Cincinnati Lancet and Clinic. Columbus Medical Journal. College and Clinical Record. The Cincinnati Times. Dental Register. Detroit Lancet. Denver Medical Times. Ephemeris. Fort Wayne Journal of the Medical Sciences. Gailliard's Medical Monthly. Indiana Medical Journal. Index Medicus. Journal of the American Medical Association. Journal of Nervous and Mental Disease. Journal of the Materia Medica. Journal of Inebriety. Louisville Medical News. Medical Annals. Medical News. Maryland Medical Journal. Medical Record. Mississippi Valley Medical Monthly. Medical and Surgical Reporter. Medical Chronicle. Medical World. Medical Bulletin. Medical Age. Nashville Journal of Medicine and Surgery. New Orleans Medical and Surgical Journal. Northwestern Lancet. Obstetric Gazette. Philadelphia Medical Times. Peoria Medical Monthly. Pacific Medical and Surgical Journal. The Pharmacist. Southern Medical Record. Sanitarian. Southern Practitioner. St. Louis Medical and Surgical Journal. San Francisco Western Lancet. Southern Clinic. St. Louis Courier of Medicine. Sanitary News. Therapeutic Gazette. Virginia Medical Monthly. Weekly Medical Review. Western Medical Reporter. The Esculapian. Atlantic Journal of Medicine. Eastern Medical Journal. The Physician's Monitor. The Polyclinic. The Texas Courier-Record of Medicine. The Kansas City Medical Record. The Puget Sound Sanitarian and Prohibitionist. New England Medical Monthly. California Medical Journal. The Iowa State Medical Reporter. The Kansas City Medical Index. Journal of Cutaneous and Venereal Diseases. St. Louis Medical Journal. The Western Medical Reporter. Quarterly Compendium of Medical Science. American Drugst. The N. C. Medical Journal. Eastern Medical Journal.

Canadian.—Canada Medical and Surgical Journal. Canadian Practitioner. Canada Lancet. Therapeutic Gazette. L'Union Medicale du Canada.

English.—The Practitioner. Students' Journal and Hospital Gazette. British Medical Journal. Brain. Medical Press and Circular. Medical Chronicle. The London Lancet.

Scotch.—Edinburgh Medical Journal.

French.—Revue Medicale de l'est. Revue Medicale. Le Praticien. Le Progrès Medical. Bulletin de l'Academie de Medecine. Journal de L'Anatomie et de La Physiologie. Archives Generales de Medecine. Recueil D'Ophtalmologie. Lyon Medical La France Medicale. Journal de Medecine et de Chirurgie. Union Medicale et Scientifique du Nord-Est. La Medicine Contemporaine.

German.—Wiener Medizinisch. Wochenschrift. Medicinisch-Chirurgisches Centralblatt. Der Irrenfreund. Memorabilien.

Swiss.—Correspondenz. Blatt fur Schweizer Aerzte.

Russian.—St. Petersburger Medizinische Wochenschrift.

Italian.—Revista Internazionale die Medicina e Cherurgia. La Sperimentales Giornale Internazionale delle Scienze Mediche.

Spanish.—Revista de Ciencias Medicas La Independencia Medica.

South American.—(Buenos Ayres).—Revista Medico-Quirurgica. El Eusayo Medico, Caracas.

Australia.—The Australian Medical Gazette, Sydney, Australia.

THE CHICAGO MEDICAL JOURNAL AND EXAMINER.

VOL. LI.

DECEMBER, 1885.

No. 6.

ORIGINAL COMMUNICATIONS.

REMARKS ON THE TOXIC PROPERTIES OF SASSAFRAS. *By* JOHN
BARTLETT, M. D., CHICAGO.

[Read before the Chicago Gynecological Society, November 27th, 1885.]

I wish this evening to call attention to a possible property of a medicine regarded up to a very recent date as almost inert.

Sassafras was discovered in Florida by the Spaniards and named by the French in 1562. It was used by them in association with other native herbs as a remedy for malarial diseases. For years past, though occasionally prescribed in combination in rheumatism and syphilis, and regarded as possessing diuretic, diaphoretic and tonic properties, it had become to be looked up as but little efficient. So that by referring to such books as were within my reach, namely, Motherby, 1785, Parr, 1809, Eberle, Trousseau, Mitchell, Warring, Stillé, Ringer, Bartholow, Phillips, Wood, Fluckeger, Farquharson, Brunton, Wormly and Blyth, and the U. S. Dispensatory, National Dispensatory, Christison's and King's Dispen-

satory, I can find no mention of the possession by sassafras of any decided therapeutical or noxious power.

More than twenty years ago Dr. Thompson, of Tennessee, stated that sassafras was an antidote to henbane and tobacco; and later, in 1870, Dr. Lyle, of Indiana, declared that he had used the oil of sassafras in a case of stramonium poisoning with the happiest results. Dr. Lyle affirmed that sassafras had power to destroy all insect life, and was an effectual antidote to the venom of the copperhead snake. In 1883 we find that Dr. Hinton claimed that sassafras tea was almost a specific for the rash produced by poison oak.

Recently paragraphs have appeared in the medical journals, in which it is stated that sassafras is not the innocent agent that it has been supposed to be, but that in reality it has violent toxic properties. This statement is made upon the authority of Dr. Charles L. Hill, from whose paper read before the 86th session of the Medical and Chirurgical Faculty of the State of Maryland, in April, 1884, the following report is extracted:

“A case of poisoning by the oil of sassafras, that once came within my knowledge, proved that it possesses far more active properties than is generally supposed, and I have been able to demonstrate by experiment on the lower animals that, instead of being a harmless, inert drug, it is a strong nervous sedative, anodyne and soporific, and in over-doses, a dangerous narcotic poison. A policeman, attracted by the sound of a falling window and other suspicious noises proceeding from a gentleman's office, entered the room to ascertain the cause. He found no one present but a boy, who was lying unconscious on the floor. He took him at once to the station-house, where I saw him shortly afterward. The officers had already diagnosed his case as one of opium-poisoning, and

were vigorously striving to keep him awake by walking, flogging and such other means as are usually resorted to in these emergencies. His stupor was profound and he no longer made an attempt to walk, but was literally dragged about in their efforts to revive him. He spoke occasionally, but only to beg them to allow him to sleep. He was in a condition of great relaxation; skin covered with a profuse perspiration; countenance pallid; pulse rapid, but weak and thready. His pupils were *normal*, and there was a strong odor of sassafras in his breath. As quickly as possible an emetic was administered, which produced a copious emesis, redolent with the odor of sassafras, with drops of the undissolved oil floating in the liquid. This was followed by free draughts of warm water, until only a faint odor of sassafras was discoverable. The vomiting relieved him and he was soon restored to consciousness. He felt no discomfort except a sense of weakness and exhaustion, and was soon able to give the following account of himself: His employer having gone home, he was preparing to close up the office, when he espied a bottle of the oil of sassafras which had been left on the desk. Remembering that sassafras had been recommended for the removal of an eruption that disfigured his face, he thought this a good opportunity for giving it a trial, and turning up the bottle—to use his own language—he took two large swallows of its contents. In a few minutes he began to feel very *stiff*, as he expressed it, but proceeded to close up the shutters preparatory to leaving for home. He raised the window for this purpose, but had not strength to hold it in this position, and it dropped from his grasp, and at the same time he fell to the floor unconscious. This suggestive case led me to make numerous experiments on the lower animals with very interesting results. Ten drops of the oil were injected hypodermically under the skin of a

mouse. The animal quickly succumbed and died convulsed. By repeated experiments I was able so to regulate the dose as to get the characteristic effects of the drug without causing the speedy death of the mouse. A glass rod was dipped into the oil and held in front of the mouse, and he seized it with his mouth. This was repeated at intervals of a few minutes, until a sufficient quantity was taken to produce the desired effect. The first symptoms observed when a small quantity was thus taken, was a slight convulsive movement, which was repeated at intervals of a few seconds, and agitated the animal's body very much like a severe hiccough. This gradually increased in severity, the movements became more unsteady, the body more arched, and the limbs so stiff that the mouse stood on tiptoe. It was noted that the one idea of escaping from the trap still predominated over all else, as he continued to climb up on the bars of the cage, only to fall on his side or back at each convulsion, until no longer able to rise.

I have repeated these experiments many times with great uniformity of result. Sometimes they would dance about for half an hour, with a peculiar convulsive movement that would jerk the head and front feet from the table. Again they would fall on their side with each convulsion and regain their feet immediately only to repeat the same movement. With cats and dogs the result was somewhat different. A drachm under the skin of a cat caused such profound insensibility that she was supposed to be dead, and thrown away, but it seems that only one of the reputed nine lives of the animal had been reached, as the next day she turned up none the worse for the experiment. A full-grown dog was paralyzed in his hind legs by a similar dose hypodermically over the loins, but it recovered. Many other experiments might be adduced, but I will not trespass on your time. There is one other property

possessed by this drug that is worthy of mention,—it is a germicide and anti-ferment of no mean quality. In some clumsy experiments made by myself I have estimated its potency in this field as about one-half the strength of carbolic acid. It has long been used as a domestic remedy for the destruction of lice and other vermin."

For some years past I have had an intention of bringing before the profession reasons, rather feeble it must be admitted, for the supposition that the medicine under consideration has marked potency in a direction, so far as I know, not suspected by medical men. Up to this time the declaration on the part of standard writers that sassafras is a remedy of questionable power, and the fact that it is hawked about the streets and used freely as a tea all over the country, have caused me to refrain from bringing before a scientific body my limited experience presently to be detailed. But the recent declaration that this drug possesses toxic properties may justify me in making the following statement.

Years ago I was called to a woman among the poorer classes, of good intelligence and education, who was having a miscarriage. Upon my inquiring as to the cause of the mishap, with a prefatory reference to her poverty and already large family, she stated that she had induced the abortion herself—that she had done so on previous occasions. She had employed, she said, "what other women used," sassafras tea. She was surprised that I did not know of the property of sassafras as an oxytoxic. She spoke as if all her friends knew how to use it as an ecboic, and she evidently looked upon it as a specific. Tea, she said, made from four or five pieces of the root, as large as the thumb and twice as long, would produce abortive effect.

A year or two later I was called to a woman two months

pregnant. For several days she had had symptoms of miscarriage of so pronounced a character that arrest of the process was doubtful. I found the patient very anxious to have a child ; she disclaimed the intention of inducing abortion, and to all my inquiries as to a possible cause, of the hæmorrhage she gave answers which left me no further question except this : " Have you been drinking sassafras tea ? " Surprised, she replied that for a week past she had used it at breakfast and supper. The proper remedies for her condition were prescribed, the possibly offending tea left off, and in twenty-four hours all was quiet in utero.

Farther than this my experience with sassafras as a possible abortifacient does not extend ; possibly some one present can supplement my remarks with knowledge or experience of his own.

A study of the toxic effects of sassafras as reported by Dr. Hill, and here suggested, would seem to show a triple resemblance to three familiar articles, opium, strychnine and ergot.

In its action as a narcotic and sudorific it resembles opium.

In its property of inducing tetanic and clonic spasms, followed by paralysis, it is similar to strychnine.

In its power hinted at of exciting the uterus, it may be likened to ergot.

It may be of interest here to call attention to the fact that the first reference to the use of ergot as an ecbotic was made by Stearns in 1807, whereas it had been used by midwives certainly as early as 1688, and probably very much earlier.

482 North Clark Street.

OBSERVATIONS ON SPIRITUALISM AND HYPNOTISM.

By G. C. PAOLI, M. D., *Chicago, Emeritus-Professor Woman's Medical College.*

[Read before the Chicago Medical Society.]

We live in a progressive period, in a time remarkable for new scientific discoveries, new mechanical inventions, new philosophical theories. Many natural phenomena which formerly were considered mysterious, can now be explained on scientific principles. We are no longer satisfied with effects, we must examine into causes, and the deeper we investigate, the less mysterious do our surroundings appear, and we discover that our planet, and all that on it, moves, is governed by immutable natural law, simple, easily understood, for, as a Swedish poet has beautifully said, "All things high and holy, both in science and poetry, are so simple that a child can understand them." In former times thunder and lightning were supposed to be caused by the meeting of a warm and cold cloud, but we have since learned that this phenomena is caused by electricity. So spirit-rappings were believed to be the medium of communication with the spirit world, but calm, thorough investigations have convinced us that such communications only occur at the meetings of a rogue and a simpleton. Superstition has always held a strong hold on the mind, and even the powerful light of science has not yet dispelled it away from civilized lands, although its forms change with changing times and circumstances. In ancient times the priests determined the future by the flights of birds, the interpretation of dreams, etc., and oracles and astrology fostered superstition, and the priesthood never lost an opportunity to profit by the eager desire of mankind to penetrate the veil that concealed the future. This kind of superstition disappeared before the light of progress, but another kind of prophets arose, who

foretold the future by cards, lines in the hand, etc. But these were not satisfactory to the thinking mind; little by little this art fell into disrepute, though there are still at this day too many who believe in like arts of the fortune-tellers. In our days a new superstition has arisen, called Spiritualism, which has now so many believers that they too form a new religious sect, whose members may sit around a table, and call up good and evil spirits at will. When spirit-rappings were first spoken of in this country there was a diversity of opinion as to how it was done, some being unwilling to believe that the raps were produced by spirits, while others believed them to be a sort of magnetic or electric operation, intended to deceive people and rob them of their money. The first who practiced these knockings, called themselves spiritual mediums, were the Fox girls of Rochester, N. Y., who made a very lucrative business of it. Some thought the raps were produced by the friction of the fingers, other that they were the results of new chemical processes. But on closer examination none of these suppositions were satisfactory, but what appeared to be a mystery proved to be in reality but as base a deception as ever has been perpetrated in a civilized land, a superstition which is a disgrace to the 19th century; resembling the Salem witchcraft and quite as injurious in its effects upon the community. Let us first examine into the causes which actuate people to impose upon the confidence of their fellow men. Some are actuated by a love of gain, others of notoriety. A third class, though undoubtedly honest in their belief, are of nervous temperament, vivid imagination, exceedingly superstitious, and easily carried away by every new issue, and particularly ready to be influenced by every thing that is beyond their comprehension. Having investigated the subject thoroughly, I will, as concisely as possible, give the result of my investiga-

tions. At an exhibition given by one of the powerful mediums, who claims to be able to move tables and other furniture by laying on of hands, I discovered that the wonder was wrought by muscular power alone. The medium in this case was a strong, muscular young woman, who, to the astonishment of the company assembled to witness her performances, pushed not only chairs before her, but the persons also who laid their hands upon them. Watching them closely, I observed that they did not at all oppose her strength, but merely kept their hands on the object while she pushed them along without their noticing it. I determined to try what effect it would have to oppose my strength directly to hers. The consequence was that she could neither move the table nor the persons whose hands were on it, which created no little merriment amongst the spectators, and surprise and chagrin to the medium. She exerted herself to push the table along till great drops of perspiration rolled down her face, and after trying in vain, she finally gave up in despair.

Others, calling themselves writing-mediums, claim to be able to receive and write down communications from departed spirits. After calling up the spirit from whom the communication is desired, the hands of the medium are placed on a little table, which is tipped or rapped on, in response to the question, Is their a spirit present? and the medium is prepared with writing materials to take down the communication, and becomes very nervous, the hands tremble, unsuccessful attempts are made to write, till finally their comes a vague, unsatisfactory answer, often very far from the desired reply. For instance, if I ask for the name of one of my deceased parents, the medium writes your mother.

If I persist in asking for the name, the medium writes below that, I am the spirit of your mother, or some equally

vague reply, which is very unsatisfactory to me, but perfectly so to those who are inclined to the belief, and have no doubts of the medium's truthfulness. If I still insist on a more satisfactory answer, the medium will write, "You are faithless and unbelieving," or, "Mind your own business," or something similar, whereupon the medium or some believer will say, "There is an evil spirit present which is disturbing the communication from the departed friend." In other words, when the good spirit is fairly cornered, the discomfiture is laid to the interference of the evil one, thus leading the inquisitive mind to another subject till he is prepared for other communications, which, from the medium's knowledge of his history and relations may be correct; then we are informed that the evil spirit is no longer present. When a correct answer is given the believers seize and enlarge upon it, but never mention when mistakes are made. I have witnessed many of these manifestations and they all remind me of the ceremonies of the Egyptians, who worshiped various animals, particularly the ox. When they desired information concerning the future they consulted this animal and accepted the movements of his head or tail as decisive answers to their questions. In ancient times the priests were physicians, the temples were the dispensaries; the legends of the saints, the history of witchcraft, charms, amulets and relics, all taught that all kinds of diseases were cured by their magic means. But although spiritualism has arisen in our times, the tricks of those who have imposed upon the public have been exposed by so many of the most renowned mediums, such as the Davenport Brothers and others, that its believers are now steadily decreasing. Hypnotism, which is derived from a Greek word signifying sleep, and is usually known as mesmerism. One century ago Dr. Mesmer imposed on the public in France with a power which

he called animal magnetism, by which he pretended to cure diseases, but after thorough investigation by several scientific men, it was pronounced a fallacy and an imposition. After residing in Paris sometime he gradually lost the esteem and confidence of the public and returned to Switzerland to enjoy the large sum of money he had accumulated in France, but never after his return to his native land did he pretend to cure diseases with animal magnetism or so called mesmerism. Later, Dr. Beard, of England, who was by no means a pretender, but rather an enquirer after truth, experimented with the magnet in order to see whether it had the power as many supposed. And instead of using the magnet, he often took a piece of wood instead, and the process whereby he succeeded in producing sleep was simply to cause the person under control to fix the eyes steadily on a certain object; this he called Hypnotism, or Sleep.

During my residence in Stockholm, the capital of Sweden, I had an excellent opportunity to become thoroughly informed on all the phenomena of hypnotism. A Swedish general, who had served in the Turkish military service and had been honored with the title of Pasha, returned to his native country financially destitute. Trying to do something for his support, he applied himself to making experiments in Hypnotism. I was invited not only to see but to observe in detail the subjects he practiced on. The individuals he influenced were generally extremely nervous young subjects, and in many cases he failed. When he addressed them he generally did so in a commanding or authoritative tone. When any presented themselves who had wills of their own, he never succeeded. During the operation he always requested all to fix their gaze upon his eyes. I was satisfied from observation that some of the faculties of the mind were suspended for a few minutes, and the individuals he experimented on were

weak-minded and credulous. A healthy and sound mind is characterized by the proper balance of all mental faculties in the same manner that a healthy body is dependent on the proper action of all the nerves. There are mental illusions and sensorial illusions caused by predominant ideas and corrected by proper reasoning. As an instance of a false impression I will relate a case taken from an English medical journal, namely: A lady in England who one summer day enjoyed a sleep in her garden, dreamed that a grass snake had entered her bowels, after which she lived in the hallucination that she felt a strange motion, which she claimed was produced by the snake. She went to several physicians to obtain medical aid which would destroy the animal, but all in vain. In the meantime a physician declared that her diagnosis was correct, and he produced a small, innocent snake, which he had concealed, and during his examination he pretended to extract the animal, and by showing it to her she was perfectly cured, and complained only of the other doctors' ignorance. To the reflecting mind it seems that these abnormal ideas are like all religions with their gods, their demigods, their prophets and their saints, which were created by the credulous fancy of men who had not attained to the full development and possession of their intellectual faculties. Still, with all the ignorance and superstition which surrounds us, the greatest science of the day, namely, evolution, has done more for the intellectual development of the world than anything else. Such illustrious men as Huxley, Darwin, Haeckel and Lyell have not labored in vain. Their first attempts were ridiculed and despised by the orthodoxy, but their investigations stand to day as a mathematical fact, and will in the end unite the people of the world by grander, nobler principles, namely, a general scientific education, self-sacrifices and devotion to humanity.

502 Webster Avenue.

SUPPLEMENTAL REPORT OF INTUBATION OF THE LARYNX. *By*
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lege of Physicians and Surgeons, Chicago.*

In the November number of the JOURNAL AND EXAMINER there appeared a report by me of five cases of true croup treated by intubation, since which time six cases more have come under my care.

CASE VI.—Through the courtesy of Drs. Dahlberg and Appleby I was called November 3d to see a little patient, aged twenty months, suffering from pseudo-membranous laryngitis. The child has been sick for three or four days and now was in imminent danger of suffocation. Tracheotomy had been proposed by the attending physicians but refused by the parents, and intubation was the only resort. Assisted by Drs. Dahlberg, Appleby and Helm the operation was performed quickly, and without the least difficulty. The distressing symptoms were relieved as by magic, and the child at once passed into a quiet, refreshing sleep. The little patient took nourishment well and appeared comfortable. On the fourth day the tube was removed with some difficulty. It was held so closely by the chink of the glottis, that it was grasped with difficulty by the extracting instruments. After three attempts, ether was given the child, when it was immediately removed. The patient did well for two days, when increasing dyspnoea indicated a re-formation of the membrane. On the third day it became necessary to re-introduce the tube to prevent suffocation. Considerable muco-purulent matter and false membrane were expelled as the tube was introduced. Again the violent symptoms were overcome. The child wore the tube for two days, when it was again removed, this time at the first attempt.

The respiration continued a little noisy and slightly embar-

rassed for two or three days, but it was unnecessary to re-introduce the tube and the child made a good recovery.

This is the youngest child that has yet been saved by intubation.

CASE VII.—November 9th I was called to see a little girl between four and five years of age, suffering from profound constitutional diphtheria. The child had been sick for five or six days, when the larynx became involved and it was evident that the child must soon die from suffocation unless relieved. Assisted by Dr. Bosworth and Prof. Nelson, intubation was satisfactorily performed and the suffering at once relieved. The child, however, died forty-eight hours later from the profound diphtheritic infection. The tube in this case did all that was expected, and the child died easily.

CASE VIII.—November 13th I was called by Dr. Kossakowski to tube a little child aged two years and two months, suffering from membranous laryngitis. Assisted by Dr. Kosakowski, while the father held the child in his lap, intubation was quickly performed. As the patient lived a long distance from me, a somewhat larger tube than was appropriate for the age, was introduced in order that it would surely be retained.

On the fourth day it was removed, but as it was impossible for the child to yet carry on respiration the smaller tube was introduced, fearing that possibly ulceration might occur from the pressure of the larger tube. The next day the tube was ejected and I was summoned in great haste. The child could have lived but a few hours longer. The dyspnoea was extreme. The larger tube was re-introduced and again death was averted. On the ninth day the tube was again removed, but it was still impossible for the child to live without it. As the tube was re-introduced large quantities to mucus, muco-

purulent matter and some shreds of false membrane were expelled. It is now twelve days since intubation was first performed upon the child. As it is in good condition, eating rye-bread, meat and cookies without difficulty, we certainly predict recovery. The tube will be removed to-morrow, when it is confidently expected that it will no longer be needed.

CASE IX.—November 16th I was again called by Dr. Kossakowski to perform intubation upon a little child of three years. The child was semi-comatose and it seemed hopeless to make the attempt. The child, however, revived after the operation, and the next morning took breakfast with the family at the table. The child died forty-eight hours after the operation, from extension of the membrane into the bronchial tubes.

CASE X.—November 20th I was called by Professors Casselberry and Hatfield to perform intubation upon a child five years old. The patient had been sick eight days, and twice the membrane had re-formed after being ejected. There was evidence of extensive exudation into the bronchial tubes, and it was feared that intubation would give no relief. However, large quantities of mucus, muco-purulent matter and broken down membrane were expelled, when the tube was introduced and the urgent dyspnoea greatly relieved.

The child, however, died about fifty hours after the operation, from membranous bronchitis and inflammation of left lung.

CASE XI.—November 21st I was called to perform intubation upon a little boy five years old, a patient of Dr. Valin. The child had suffered from a severe attack of pharyngeal diphtheria, as had two or three other members of the family. There had been extension of the disease into the larynx, and at this time the child was in the agonies of slow strangulation. All hope had been abandoned, but intubation was given a trial. With the assistance of the father and Dr. Valin the tube was in-

roduced without difficulty, and with the usual result of immediately relieving the violent symptoms. The child is still wearing the tube comfortably. This is the fourth day, and the pulse is now 100, temperature 100, respiration 24, and taking nourishment well. It is very likely that recovery will be the happy result in this case.

Of these eleven cases there have been two complete recoveries, and if cases eight and eleven terminate favorably, as now seems more than likely, we shall have 36 per cent. cured by intubation, a result far better than we get from tracheotomy in Chicago. It must be remembered that seven of these cases with two recoveries were but three years of age or under, a period in which tracheotomy is rarely successful.

November 27, 1885.—Cases eight and eleven are doing well without the tube, and convalescence is assured.

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F. E. WAXHAM, M. D.

A REPORT OF TWO HUNDRED CASES OF TONSILITIS.

By J. M. G. CARTER, M. A., M. D., PH. B., President of the Lake County Medical Society, Waukegan, Illinois.

(Read before the Chicago Medical Society, Nov. 16, 1885.)

On the permeable, sandy shore of Lake Michigan, with a prevailing northwest wind for a great part of the year, in connection with the natural humidity of the atmosphere near so large a body of water, we would expect to meet with a large number of cases of throat and chest-diseases. It was under such circumstances that the cases occurred, which I desire to report briefly on this occasion. For the purpose of getting a better understanding, possibly, of the relation existing between tonsilitis, diphtheria, rubeola, rōtheln, and scarlatina, it may be well to mention the occurrence of these diseases

in the order of their sequence, during the time which is represented by the two hundred cases of tonsilitis that are here reported.

These cases occurred during the last two years. In the fall and early winter of 1883, I had some forty cases of scarlatina. In the months of 1884 the scarlet-fever epidemic subsided, and immediately succeeding it came an epidemic of tonsilitis. Following that, in the summer, we had some cases of rubeola. The measles subsided by fall, and again there were many cases of tonsilitis, and although there were a few cases of mild scarlet-fever through the winter of 1884-85, there were many more of sore-throat. During the spring and summer of 1885 we had an epidemic of rötheln.

During the epidemic, or rather endemic of tonsilitis following the epidemic of scarlet-fever, I treated within the months of March, April and May, about ninety cases of this disease of the throat. During the same months of 1885 I treated sixty cases. The others were somewhat sporadic, and distributed throughout the remaining months of the years 1884 and 1885.

The disease is marked at the beginning by chilliness; aching in the limbs, back of the neck and head; nausea; a feeling of stiffness in the throat. The throat and tonsils are red and the tonsils swollen; and the glands at the angle of the jaw are usually swollen and tender. In 75 per cent. of the cases, on the second day, there are ulcerated patches on the tonsils, and in 5 per cent. a tendency to the formation of a diphtheritic membrane. In 20 per cent. of these cases there are no patches on membranes. The beginning-symptoms are the same in all, and ordinary cases extend over a period of from three to five days,—usually beginning to grow better on the third day. Five cases were sick as long as two weeks;

three cases developed into quinsy, and I opened the tonsilar abscess; one case had quinsy and diphtheritic deposits. Two cases had trouble with the glands—one with the sub-maxillary and the other with those of the neck, both on the left side. In both cases it was necessary to lance the abscess. In two cases the swelling of the tonsils was very rapid and the pain of swallowing excruciating. The pulse was usually 120, and temperature 104° in adults. In children, the pulse ranged from 120 to 160, the temperature being the same as in adults. As the swelling of the tonsils began to subside, the fever began to abate. One other case I will mention, because of its close apparent relation to scarlet fever. A young Miss of fourteen was taken with the symptoms described above, the tonsils being very large. There being some scarlet fever about, we were anxious and examined and watched for development of the disease. She recovered in five days, but manifested no other than the symptoms of tonsilitis. Five days later I was called to see one of the children in the same family, and discovered at once a case of scarlet fever. Four of the children had the disease in the next ten days, three of them being malignant cases, of whom two died. Of this family the only child that did not have scarlet fever had a protracted siege of typhoid fever, three months later. Perhaps 25 per cent. of the cases I have reported were left with chronically enlarged tonsils. During the time of the occurrence of these cases, I treated but six cases of diphtheria, and they were not severe. Of the two hundred cases all recovered.

The treatment in these cases varied very little in most cases. It consisted mainly of aconite and belladonna, with, occasionally, chlorate of potassa. Sometimes, especially if there was much disturbance of the stomach, I added gelsemium. This was used internally, usually in small doses, every 30 or

60 minutes. In adults and children old enough to gargle or use a gargle as a throat-bath, I employed local treatment. I have used several gargles—alcohol and water, alcohol and chlorate of potash, water and chlorate of potash, hot water, ice water, salt and vinegar, salt and water, according to circumstances and the condition of the patient. Ordinarily I prefer alcohol and chlorate of potass. where the patient can use a gargle. Excellent external applications are mustard, camphor, kerosene, alcohol, red and black pepper.

In some cases of rapid swelling and intense pain, I secured the quickest results from steam-atomization, using carbolic acid and chlorate of potass. I have used the steam from hot water in many cases with benefit. I was called to a gentleman who was subject to quinsy. He said that he should go through the full course of the disease, he knew, for he had never succeeded in having it checked. I gave him one drop of tincture of aconite and tincture of gelsemium, each, and four drops of tincture of belladonna every hour. I also directed the use of steam, and an alum gargle. The throat grew better, and he recovered without going through any "course" of disease. He has had one similar attack since, and by treating him in the same way we had the same result.

The tincture of the chloride of iron I employed in a few cases. In one case I employed the compound of tincture of iron, carbolic acid, glycerine, chlorate of potash and water, and with no better result than I received from more palatable preparations.

The ordinary course of tonics was prescribed, in some cases, as an after treatment, but generally no tonic treatment was needed. Lactic acid, nitric acid, and hydrochloric acid were freely used in a few cases.

I will report that in the great majority of cases alcohol, chlo-

rate of potass. and water gave the most satisfactory results; while internally tincture of aconite, tincture of belladonna and tincture of gelsemium are equally beneficial.

There must be some cause for such a prevalence of this disease in any locality. There must be a cause for its prevalence at the same season of the year. It will be remembered that the greater number of these cases occurred during the months of March, April and May. In casting about for some special features, which during these months are different from, or in excess of, those of other months, we find an apparent cause in the prevailing northeast wind. During the three months named, the western shore of Lake Michigan has more days of lake-winds than of winds from any other direction. The lake-winds prevail more generally at Milwaukee than at Chicago. During the month of May, for instance, at Milwaukee the easterly winds are to the westerly as 62 to 24, while at Chicago they are as 44 to 40. In this relation, Waukegan more nearly approaches Milwaukee. We usually have an increase of the disease under discussion during the month of July, and during that month there is a preponderance of lake-winds at the points mentioned. At Chicago, the easterly winds are to the westerly as 60 to 33, while at Milwaukee they are as 48 to 37.

At Waukegan, the record for the ozone-test, last year^{*} showed that the presence of that agent was very marked during the time when tonsillitis prevailed; that is, the lake-winds seem to sustain some special relation to ozone in the atmosphere. Not having made any experiments with a view to determine this relation, I am not prepared to discuss it. During the last summer, especially in July, northeast and east winds prevailed to a greater extent than usual. R  theln was the prevailing disease, 75 cases of which occurred in my practice. More

than 50 per cent. of these cases were accompanied with sore throat,—the symptoms being precisely the same as in simple tonsilitis. Nearly one-half of the total number of cases of rōtheln had ulcerative patches on the tonsils.

Exposure to cold has not been a frequent cause of this sore-throat, for a very large proportion of my cases were parties who had not been exposed to cold; however, such exposure in some cases was known to be the exciting cause. I would mention one other point. I have noticed that rheumatic and nervous patients were not so well during these periods.

From a consideration of all these points, I have been led to suspect that the disease under discussion, like nervous disorders and rheumatism, is affected by, if not due to, the electrical condition of the atmosphere; but whether to an excess or a deficiency of electricity I have not sufficient data to determine accurately. We know this: that the disease prevails when there is a humid atmosphere, an excess of ozone, a lake-wind, and a low temperature. We know, further, that these agencies work changes in the electrical condition of the atmosphere.

A CASE OF CHRONIC SIMPLE GLAUCOMA TREATED WITH
ESERINE. S. O. RICHEY, M. D., *Washington, D. C.*

[Read before the Medical Society of the District of Columbia.]

This is not written with a hope of adding anything new to the subject, nor with an intention to fully discuss the varying views of its pathology, but only to report a case, in my judgment, worthy of record, because it is one of "the type of the whole group of glaucomatous diseases."

On January 21, 1885, I examined Mrs. F., aged 37 years,

whose left eye was blind from absolute glaucoma; the vision of her right eye was $\frac{2}{200}$, and much blurred. She knows the left eye to have been blind for seven years; the right has been affected for that length of time, but she does not know whether it has been diseased for a longer time than seven years or not. When she was about eighteen years old she noticed the halo, and had flashes of light, but these do not now continue. The right eye has been sensitive to light for seven years, but she has never had any pain in either of her eyes.

Just before Christmas she sewed quite a good deal, using her mother's glasses, before which time she had not used her eyes for a year at close work. "The room seems full of smoke," as she looks about it now. She was frightened into consulting a physician by finding that, although she could see the form, she could not distinguish the face of her pastor in the pulpit a few days since.

A lens serves only to interrupt the vision of the right eye. The discs are well cupped with sharp outlines. The excavation is deeper in the left eye, and the nerve is atrophied. Tension $+3$; both feel like small marbles; the media are clear, the pupils half-dilated and regular; the anterior chambers are shallow, and the corneæ anæsthetic. The field of vision is limited to the nasal half.

Her general health is bad; her digestion is poor, associated with great mental depression. The idea of an operation creates dread, and the treatment adopted is sulphate of eserine (gr. $\frac{1}{4}$ to f $\bar{5}$ i), applied twice a day, with dry cups to the temples.

January 25th. Vision of right eye, $\frac{2}{20}$; tension $+2$. There is no very marked change in the size of the pupils, nor in the depth of the anterior chambers. Liquor potassæ arsenitis in gtt. ii doses was given *ter in die*, to correct fermentation,

and kal. iod. after meals, to hasten tissue change, are added.

January 29th, the pupils are normal in size, but still sluggish, due now probably to the eserine. Vision, $\frac{20}{40}$. The improvement constant and gradual until March 28th, when vision, $\frac{20}{20}$; the tension normal. The field is not altered.

November 11th, 1885, eleven months after the first interview, the field is not changed; the tension is normal; vision, in the right eye, is slightly less than normal, and her general condition is much improved. She has been advised to persist, for a time, in the occasional use of the myotic, because the condition is a very chronic one; that she must avoid mental excitement, and preserve her general bodily health in the hope that this interruption to the progress of the disease may be permanent. Iodide of potash was exhibited with a view to breaking up any adhesions of the iris that might exist, upon the basis of its action in the treatment of posterior synechia. This also has been continued at intervals.

The special features of the case are: the age of the patient when first affected (eighteen years); the great amount of tension tolerated for so long a time, and the degree of vision recovered without operation. There was no hypermetropia, and the necessity for convex lenses at her age may be explained by the probability of the suspensory ligament being put so much on a stretch by pressure that accommodation was interfered with, or that the retina, being obtunded by pressure, required larger images than usual.

Mr. Henry Powers* says: "Eserine is a valuable remedy, and he is inclined to doubt whether some of the results attributed to sclerotomy might not really have been due to the use of eserine. If the pupil responded to eserine, he would certainly continue its use and not operate at that time."

* O. Review, 1882, p. 262.

This affection, presenting itself in so many ways, is least hopeful in the chronic simple form, which rarely announces its presence before the age of fifty years, and makes slow, insidious progress, generally without any inflammation, as in this case, and commonly proves fatal to vision, whatever the treatment. Though many expedients are helpful, it is very intractable.

The methods of relief are surgical, except the use of myotics; iridectomy, sclerotomy, and stretching the supra-trochlear nerve,—the last suggested by Badal, of Bordeaux, in 1882,—each founded upon a rational theory of the pathogeny of the affection.

Increase of tension is pathognomonic of the disease, and whether this is due to hypersecretion or an impeded outflow of the intra-ocular fluids, opinions differ. Priestly Smith* says: "It is certain that glaucoma is essentially due to pressure; that it is cured by reduction of tension, and that this reduction is due to restored filtration."

It was upon this theory of the nature of glaucoma that Græfe performed iridectomy, to relieve swelling of the ciliary folds, and the adhesions of the iris at the iritic angle, which obstruct the entrance of the intra-ocular fluids to the canal of Schlemm, though Wolfe† claims the benefit from iridectomy to be due to the removal of a section of the diseased nerves, upon the theory of nutritive changes in the nerve-centers.

The cupping of the optic disc is held by Mooren‡ to be due to changes external to the eye, and he is convinced that "The presence or absence, and breadth and depth of the excavation are not dependent in any way on the degree of increase of in-

* Ophthalmic Review, 1882, p. 261.

† Wolfe, On Diseases and Injuries to the Eye.

‡ Archiv. Ophth., March, 1884.

tra-ocular pressure; . . . that even the most brilliant therapeutic results will not alter the fact that in glaucomatous excavation of the optic nerve, or in the excavation of glaucoma simplex, with or without inflammatory symptoms, we have to deal with some anomaly of nutrition of the optic nerve."

All observers agree that there is no fixed relation between intra-ocular tension and the disc-cupping, though when there has been great tension with little or no cupping, the fact has been attributed to the greater power of resistance of the optic papilla.

Gowers* records the fact that "Glaucoma is sometimes observed in cases in which there was long standing liability to unilateral neuralgia, . . . that optic atrophy has resulted from the same cause, and that irritation of the fifth nerve may increase intra-ocular tension." Douders† refers to the fifth nerve as controlling intra-ocular secretions, and Grünhagen and Hippel‡ found that irritation of the trigeminus produced increased intra-ocular pressure.

From the foregoing it may be seen that there are at least two methods of accounting for glaucoma: the pressure theory and that of a neurosis. These are not necessarily antagonistic, for each may explain one stage of the same attack. Each attack must have an initial stage, as, in secondary glaucoma, a dislocated lens, or an intra-ocular hemorrhage; so, in primary simple glaucoma, some disturbance of the sympathetic system may interfere with the balance existing between the secretion and filtration of intra-ocular fluids, and by increasing tension, inaugurate a "vicious circle."

Iridectomy is the most reliable of all the measures adopted

* Medical Ophthalmoscopy, p. 172.

† Klin. Monatsblatt für Augenheilkunde, 1884, p. 434.

‡ Arch. für Ophthal. B. xiv. 3, p. 219.

in glaucoma, though it sometimes fails, and in some cases the probability of hemorrhage forbids it. Its influence may be explained in accordance with either theory, for it acts in both ways, relieving tension, and by removing a section of the nerve, but Mooren thinks it "useless in all cases of glaucomatous disease which do not originate in the eye but in the centre of nutrition of the optic nerve." Badal's operation of stretching the supra-trochlear nerve is based upon the theory of a neurosis, and has been efficient in some cases—even in some which have defied other efforts at relief. It is, however, not reliable, and should be only a last resort.

Sclerotomy reduces tension by opening a way between the aqueous chamber and the sub-conjunctival space, producing an anterior staphyloma and establishing permanent drainage.

It is likely to be followed by distortion of images in consequence of the staphyloma. The necessity of using a myotic diminishes the importance of the procedure, and the objection has been made that it excites sympathetic inflammation. As the incision must be made within the sclerotic, it is probable the ciliary region has been wounded in such instances.

Priestly Smith claims the essential part of this operation and iridectomy to be the same, only the incision is more favorably made in sclerotomy; that when the incision is made as peripheral in iridectomy, it is the more reliable operation, and the effect is more permanent, although it is not so safe in cases where there is immediate danger of hemorrhage. Argyle Robertson's operation of trephining the cornea has been successful in a few cases, but has not at any time met with general adoption. Paracentesis is a measure to gain time, or to discover the amount of vision that may be recovered by an iridectomy in acute glaucoma.

Eserine, it is said, gives its best results in acute primary

glaucoma, and may entirely relieve the eye, but while it sometimes improves the condition in simple chronic glaucoma, this improvement will probably not be permanent.

Williams,* of Boston, has not an impression favorable to the use of eserine in glaucoma, and doubts its efficiency in this affection in the hands of others. This view is one for which it is difficult to account, as the drug has unquestionable powers to reduce tension.

Snell† believes that eserine not only improves vision but arrests the progress of chronic simple glaucoma.

I have not found it produce follicular conjunctivitis, to which Wecker refers, because, I think, I have not been accustomed to use it in so strong solution. The milder solutions have in my hands been as useful as the strong ones and without any misadventure, though they must be used more frequently. The frequency of application of a mild preparation lessens the tendency to spasmodic myosis. The action is more gentle and less likely to produce congestion of either the conjunctiva or the iris. Eserine is preferable to pilocarpine, because this disposition to spasm may be controlled, and it maintains myosis for a longer period.

BLINDNESS FOLLOWING HEMORRHAGE.

By BOERNE BETTMAN, M. D.

(Read before the Chicago Society of Ophthalmology and Otology.)

Cases of amaurosis following hemorrhage, although not infrequent, are, owing to the darkness enshrouding their pathology, full of interest. The two cases which I will report to the Society this evening offer certain symptoms which point

* Williams, *Diagnosis and Treatment of Diseases of the Eye*. 1881.

† On Eserine and Pilocarpine in Glaucoma, and Eserine in Ocular Neuralgia.

apparently to a common cause, namely, intracranial hemorrhage with subsequent alterations of the optic nerves.

The clinical history of the first case was extracted from the books of the Eye Clinic of Heidelberg, during my assistantship. It reads as follows:

Margaretha Feth: Aet 26, was admitted into the clinic, 1879. Patient is of healthy parentage, her mother is a hale and hearty woman of 79 years. Her father, who died three years ago of heart disease, reached the same age. Up to her fifth year she had repeated attacks of convulsions; several brothers and sisters, seven in all, died a few months after birth from the effects of similar spasms. Miss F. was otherwise a healthy, well-nourished child. Three years ago, while descending the cellar stairs, she slipped, broke and dislocated her left femur. After fifty-five days' confinement in the hospital, under the care of Prof. Nussbaum, she was discharged with a shortened limb.

On the 17th of May, 1879, while at home, she suddenly experienced a severe pain in the left side of her head, accompanied by dizziness and severe spells of vomiting. A physician was hastily summoned, he prescribed a number of powders which she could not retain in the stomach. She was unable to sleep that night; the headache continued during the next day and night, also the vomiting at frequent intervals. Her menstrual flow, which lasted from the 13th to the 18th, was not as profuse as on former occasions. On the 21st, whilst in bed, another sudden attack of dizziness resulted in unconsciousness. In this condition she remained two days. During the morning of the 22d her mother observed a large quantity of dark blood well from her mouth. The hemorrhage, according to the parent's statement, lasted fully ten minutes. The blood was not coughed up, but simply flowed from the mouth

as a dark, foamy substance, mixed with a greenish mass, undoubtedly secretions from the stomach. She remained unconscious or asleep until the next morning; on awakening, all was dark around her. She was unable to see her mother standing before her with a glass of milk in her hand. Quite good sight returned to the right eye during the course of the day. A few days later, while on her way to Mannheim, dizziness again supervened, and she fell unconscious to the ground. In this state she was removed to the hospital. She regained her senses two days later. With the right eye she could barely distinguish the faces of friends close to her bed. Vision gradually diminished. On the day of admission into the clinic there was complete amaurosis of both eyes. The pupils were dilated ad maximum, the irides did not respond to light. An ophthalmoscopic examination showed decided atrophy of both discs, with thin, thread-like vessels, on both sides of which were seen broad opaque strips (perivasculitis) extending towards the periphery.

The patient remained in the hospital a long time; treatment of all varieties proved useless. Before entering the house she had taken large doses of iodide of potash, and received numerous injections of strychnine.

February 18, 1885. Dr. Hessert kindly sent me for examination a little patient, George Dohl, aged 3 years. The parents informed me that the child had fallen ten days previously against the edge of a chair, striking with the upper teeth. The boy sustained no injury except a loosening of the upper incisors. The gum bled profusely, the blood trickling down between the teeth. After all house remedies had been tried, and failed to still the hemorrhage, Dr. Hessert was called in. He succeeded in arresting the bleeding on the third day, by making digital compression, which the parents continued some

time in accordance with his instructions. The following, the fourth day, was marked by long-continued, violent convulsions, lasting fully forty-eight hours. Blindness in both eyes was noticed during an interim of the spasms. The boy presented the following appearance when brought to my office: Pale, weak-looking child, pupils of both eyes dilated, reaction to light good and quite prompt. Media of both eyes clear. Papillæ very anæmic, almost perfectly white. Calibèr of artèries diminished, veins somewhat dilated. Vision, O.

The child was too young to permit me to test the sensibility of its retinæ to light. My prognosis was unfavorable, still I took particular pains to call the parents' attention to one favorable feature of the case, namely, the prompt reaction of the irides, which I interpreted as indicative of a partial restoration of vision. Nourishing food, fresh air and other tonics were prescribed. Stimulants of all kinds were prohibited. I subsequently learned from Dr. Hessert that the vision had improved quite materially, sufficient to enable the child to roam about the house without danger of falling over or knocking against the various pieces of furniture. He could also distinguish smaller objects, as for instance, a knife or key, when thrown upon the floor. The child unfortunately succumbed to a second attack of convulsions, occurring eight weeks after the first.

The clinical histories of these cases appear so clear that but little difficulty will be experienced in assigning them to that category of cases mentioned in the introductory remarks. Several theories have been advanced to explain the relationship between these hemorrhages and amaurosis. The oldest and by far the most plausible theory is the one apparently adhered to by that critical observer, Alfred von Graefe. He relates two cases of sudden blindness following hæmatemesis.

After a thorough analysis he expresses his inability to attribute the amaurosis to any direct cause, but mentions later on (in another paper) that in all probabilities irritative changes in the optic nerve, behind the eye-ball, may be regarded as the exciting influence.*

The clinical history of his first case, that of Charles R., a farmer, aged 43 years, shows that a severe spell of vomiting (one-half quart blood), which had been preceded by eight to ten similar attacks, was followed by severe palpitation of the heart and continuous headache. On the evening of the second day following this severe hematemesis, and when he had recovered from the weakness induced by the loss of blood, he noticed a cloud was before his eyes, which developed into complete blindness six hours later. Since then his condition has undergone no material change.

Graefe attributed the haematemesis to an ulcer of the stomach.

In the second case a hemorrhage from stomach and bowels was followed two days later by dimness of sight, preceded by severe headache. The obscuration of sight increased gradually, terminating in amaurosis by the end of the second day. Graefe also states that on two rapidly following occasions, occurring soon after power of sight had been annulled, the left hand became partially paralyzed, the mouth was distorted, enunciation became difficult and indistinct.

Samelsohn† mentions two cases of amaurosis, one one-sided, which can be clearly traced to a peripheric lesion.

In two other cases recorded by him the loss of vision cannot be accounted for in the above manner, neither can it be ascribed to a central cause, the common factor of both hæ

*Graefe's Arch. Vol. xii., p. 149.

†Gr. Archiv. Vol. xviii., p. 225.

matemesis and amaurosis. He therefore finds refuge in another theory which he describes at great length. He is of the opinion that the pressure exerted by the blood in the brain is counterbalanced by that of the lymph column. A diminution in quantity of one fluid will be followed by an excess of the other. The result of this deficiency on the part of one and a superabundance of the other; will result in imperfect nutrition, pressure and inflammation. Thus it is supposed that an excessive hemorrhage from the stomach or rectum will deplete the system to a certain extent, and produce a cerebral anaemia. As the blood leaves the brain the lymph rushes in to produce the dire catastrophe. Dr. Samelsohn supports this hypothesis on experiments made by H. Gaethgans. This observer found that a congestion of the brain is followed by increased flow of lymph from that organ. The above explanation may be adequate to account for amaurosis of both eyes following hemorrhage, but certainly is not tenable when applied to one-sided amaurosis.

Finkenstein's* case developed complete and gradual amaurosis following extensive gastric hemorrhage induced by ulceration of the stomach. The author hints at a possible cerebral connection between the necrotic process of the mucous membrane and the disturbance of the visual tract.

Another method (which was formerly regarded with favor) of interpreting the amaurosis, was to ascribe it to general anemia. Were this so, the archives of medicine in the Pre-Esmarck period would have been replete with instances of this kind. The most striking proof of the inconsistency of such a theory is one-sided amaurosis and the continuance of blindness in cases where the hemorrhage produced little if any anaemia. No doubt many factors come into play, and are capable of

*Gr. Archiv. Vol. viii., p. 209.

producing amaurosis, as a resultant of hemorrhage. But it appears to me that one and an almost constant occurrence in connection with the subject in question, has not received the attention it deserves, in fact it is hardly alluded to in the papers relating to this affection. It is a well-known fact that hemorrhage in all parts of the body frequently occur in debilitated subjects; that, owing either to some change in the walls of the blood vessels, or some anomaly of the circulation, hemorrhages, either by diapedesis or rhexis, are prone to occur in such individuals. I have frequently observed extravasations in the retina, in cases of pernicious anæmia,* and Litten† has recorded many such occurrences in the cases of anæmic individuals generally.

Exertions of all kinds naturally form an incentive to rupture of weakened blood-vessels, even those in a normal condition frequently give way, as the result of either increased or diminished pressure of the blood column. How often do we observe subconjunctival ecchymosis directly attributable to excessive spells of coughing or vomiting. Numerous cases have been reported of hemorrhages into the retina‡ vitreous, caused by bodily strain.

In our own cases severe attacks of vomiting and spasms, lasting in one instance several days, in the other, forty-eight hours, were undoubtedly the direct cause of the amaurosis. The sudden pain in the head experienced by the first case, followed on two occasions by vomiting, dizziness and unconsciousness, point to an intracranial lesion. In Samelsohn's cases we note that both patients complain of headache following hæmatemesis. Graefe also calls especial attention to this

*Bettman. The Condition of the Eyes in Fatal Anæmia.

†Archives Ophth. Vol. xi, p. 1.

‡Berl. kl. Wochenschr., 2d, 20 W. 21, 1877.

symptom, and mentions in this connection two slight attacks of paralysis.

The above would tend to demonstrate that although hemorrhage from stomach and the gums may be followed by amaurosis, the bleeding from these parts should not be considered as the direct cause of the blindness, but rather as a symptom concurrent with intracranial changes bearing directly upon the optic tract: hemorrhage.

113 Adams street.

EDITORIAL.

THE NINTH INTERNATIONAL MEDICAL CONGRESS.

So much has already been said and written regarding the next International Medical Congress, and the mistakes and misunderstandings attending its organization, that it is an unwelcome task to say more regarding it. Since, however, there appears to be much confusion of ideas, and, also, such an erroneous impression at home and abroad, of the history of the efforts at organization, it may lead to a better understanding of the case if the facts be given, *ab initio*, in chronological order.

During the annual meeting of the American Medical Association in Washington, D. C., in May, 1884, a desire was expressed that an invitation be extended to the Eighth International Medical Congress, about to assemble in Copenhagen, Denmark, to hold the next Triennial Congress in Washington, D. C. It was understood that in extending such invitation the American Medical Association was selected, because it represented, more fully than any other medical organization in the United

States, the whole medical profession of our country. For that reason the medical profession considered that its wish and its invitation would be regarded as more authoritatively expressed if the American Medical Association would consent to become sponsor for it, and to issue the invitation. The president of the Association, in his address, advised compliance with this expressed wish. Thereupon, that part of the president's address was referred to a committee, who reported as follows:

"Dr. J. S. Billings, of the Committee on International Medical Congress, presented the following: 'The committee to which was referred that part of the president's address relating to the proposed meeting of the International Medical Congress in the United States, in 1887, has the honor to report that it has conferred, so far as the limited time at its disposal would allow, with leading members of the Association, representing all parts of the country, and that the sentiment appears to be practically unanimous in favor of carrying out the suggestions made by the president.

" 'The Committee accordingly respectfully submits the following resolutions with the recommendation that they be adopted by the Association:

" '*Resolved*, 1. That a Committee of seven, of which Dr. Austin Flint, the President of this Association shall be a member, shall be appointed by the President.

" '2. It shall be the duty of this Committee to extend in behalf of the medical profession of the United States to the International Medical Congress, about to meet at Copenhagen, a cordial invitation to have the next International Medical Congress meet at Washington, D. C., in 1887.

" '*Resolved*, 2. That the Committee shall elect its own officers, and that, in case the invitation is accepted, it shall proceed to act as an Executive Committee, with full power to fix the time and to make all necessary and suitable arrangements for the meeting of such Congress, and to solicit funds for this purpose.

“‘ 3. That the Committee shall have power to add to its membership; to perfect its organization, and that to meet the preliminary expenses of printing, postage, etc., the chairman of this Committee is authorized to draw upon the Treasurer of this Association for an amount not exceeding four hundred dollars

“(Signed)

“‘ J. S. BILLINGS,

“‘ L. A. SAYRE,

“‘ I. MINIS HAYS,

“‘ H. F. CAMPBELL.

“‘ R. W. Foster not present.’

“On motion, the report was adopted.”

The committee thus appointed proceeded to Copenhagen and presented the invitation. It was considered by the Eighth Congress, and formally accepted.

After the return of the committee to the United States, preliminary arrangements were begun by the committee of invitation, that, under the resolutions above given, was made “an Executive Committee with full power to fix the time and to make all necessary and suitable arrangements for the meeting of such congress, and to solicit funds for this purpose,” and, “that the committee shall have power to add to its membership, to perfect its organization.”

It seems that the committee, thus made an executive committee, considered that under the resolutions which authorized its appointment full power was conferred upon it to make *all* arrangements for the congress, even to the selection of the general officers and the arranging of the different working sections, and the completion of the organization of each section. In fact, that plenary power had been conferred upon the committee by those resolutions, and that the duties of the American Medical Association, practically, ceased with the appointment of the committee, and the appropriation of funds for the specified purposes.

A large part of the American Medical Association, who

participated in the Washington meeting and voted for the resolutions, claims to have understood their import differently from the construction put upon them by the committee, which is now generally designated as "the original committee." The incompleteness of the instructions given by these resolutions, and the difference in the interpretation of them, seems to have been the starting-point of the differences which have so greatly divided the profession of our country, and caused so much misunderstanding and anxiety abroad. "The original committee" added to its number as it had been specially authorized to do, and proceeded not only "to perfect its organization," but also "to perfect" the organization of the congress.

The resolutions did not appoint the original committee to the offices of the congress, nor, on the other hand, did they say that the members of that committee should not be appointed officers of the congress. It is assumed that the members of the original committee, and those who were added to that committee, making the "General Committee," acted in accordance with what was believed to be for the best interest of the congress, although it has been charged that personal considerations had not, in some instances, been subordinated to the welfare of the congress. However, in discharging the important and difficult duty assigned the committee, it was not to be expected that it was practicable to wholly avoid mistakes, and in discharging its duties, it performed them very well, in many respects. The selections made were, in the main, men who are eminent, capable, and representative. Whilst it is claimed that mistakes were made, yet they were not such as would have had a specially unfavorable influence on the congress, except in the rules adopted regulating the American membership of the congress, which restricted the membership to delegates from organized regular medical so-

cieties and associations, "and of such persons as may be specially designated by the executive committee . . ." Such restriction had not been imposed at the meeting of a congress yet held.

Just prior to the annual meeting, in April, 1885, of the American Medical Association, in New Orleans, the Executive Committee announced the "Rules and Preliminary Organization" of the Ninth Congress, without having reported officially to the American Medical Association the fact that it had performed the duty assigned it, by the association, of presenting the invitation, or the fact that the invitation had been accepted.

These acts of omission, and of commission, gave rise to criticism upon the course of the Executive Committee, and to charges that it had exceeded its authority. There were those who, whilst admitting that the resolutions authorized the Committee of Invitation to elect *its* own officers, and to add to *its* membership, yet claimed that in saying that "it shall proceed to act as an Executive Committee, with full power to fix the time and to make all necessary and suitable arrangements for the meeting of such congress, . . ." authority was not thereby given to it to select the officers for the congress. It was further claimed that the committee which had now become the "Executive Committee" should have reported to the American Medical Association, from which it had received its appointment and its powers, the preliminary work that had been done, in arranging for the congress during the interval between the two annual meetings of the Association, and before making a public announcement of that preliminary work. It was further claimed that when such report should be made, by the Executive Committee, it was competent for the association—the appointing power—to receive such report and to retain, or

alter, or discharge its committee, and to adopt, or modify, or reject the report of the work of its committee.

Here the second misunderstanding seems to have arisen. The Executive Committee claimed that it had not exceeded its authority, according to its understanding of the power conferred upon it by the resolutions adopted at the previous annual meeting of the association; that it had acted in good faith, and that it believed that its work had been well done, and done with an understanding, on its part, that the committee was to be continued intact, and that its work was not to be subject to revision or alteration by the association.

After discussion of these matters in the annual meeting of the American Medical Association in April, 1885, at New Orleans, when the "Original Enlarged Committee" made its report to the Association, it was

1. "*Resolved*, That the Committee appointed by this Association, to arrange for the meeting of the International Medical Congress in America, in 1887, be enlarged by the addition of thirty-eight members, one from each State and Territory, the District of Columbia, the Army, Navy and Marine Hospital service, to be appointed by the Chairman at this meeting, and that the committee, thus enlarged, shall proceed at once to review, alter and amend the motions of the present Committee as it may deem best."

(This resolution was amended by the provision, "that the members of the Committee should be selected by the respective State delegations.")

The following is a list of the Committee enlarged in accordance with the resolution as amended:

W. E. Anthony, M. D., Providence, R. I.; G. Baird, M. D., Wheeling, W. Va.; Robert Battey, M. D., Rome, Ga.; F. W. Beard, M. D., Vincennes, Ind.; J. S. Billings, M. D., U. S. Army, Washington, D. C.; J. M. Browne, M. D., U. S. Navy,

Washington, D. C.; L. P. Bush, M. D., Wilmington, Del.; H. F. Campbell, M. D., Augusta, Ga.; R. Beverly Cole, M. D., San Francisco, Cal.; E. P. Cook, M. D., Mendota, Ill.; W. C. Dabney, M. D., Charlottesville, Va.; Charles Denison, M. D., Denver, Col.; W. E. Duncan, M. D., Ellendale, Dakota Ter.; J. W. Dupree, M. D., Baton Rouge, La.; Ellsworth Eliot, M. D., New York City; G. J. Englemann, M. D., St. Louis, Mo.; N. F. Essig, M. D., Plattsburg, Mo.; Austin Flint, M. D., LL. D., New York City; E. P. Frazer, M. D., Portland, Oregon; George F. French, M. D., Minneapolis, Minn.; A. Y. P. Garnett, M. D., Washington, D. C.; S. C. Gordon, M. D., Portland, Me.; J. W. S. Gouley, M. D., New York City; F. M. Gunnell, M. D., U. S. Navy, Washington, D. C.; John B. Hamilton, M. D., U. S. Marine Hospital Service, Washington, D. C.; I. M. Hays, M. D., Philadelphia, Pa.; G. Johnston, M. D., Baltimore, Md.; George A. Ketchum, M. D., Mobile, Ala.; R. A. Kinloch, M. D., Charleston, S. C.; D. A. Linthicum, M. D., Helena, Ark.; John S. Lynch, M. D., Baltimore, Md.; J. J. McCachran, M. D., Laramie City, Wyom. Ter.; J. W. McLaughlin, M. D., Austin, Tex.; R. C. Moore, M. D., Omaha, Neb.; Robert Murray, M. D., U. S. Army, Washington, D. C.; R. D. Murray, M. D., Moultrie, Fla.; J. W. Parsons, M. D., Portsmouth, N. H.; William Pierson, M. D., Orange, N. J.; N. J. Pitman, M. D., Tarboro, N. C.; L. A. Sayre, M. D., New York City; X. C. Scott, M. D., Cleveland, O.; Nicholas Senn, M. D., Milwaukee, Wis.; John V. Shoemaker, M. D., Philadelphia, Pa.; F. L. Sim, M. D., Memphis, Tenn.; A. R. Smart, M. D., Hudson, Mich.; D. W. Stormont, M. D., Topeka, Kan.; J. M. Taylor, M. D., Corinth, Miss.; E. F. Upham, M. D., West Randolph, Vt.; W. H. Wathen, M. D., Louisville, Ky.; W. Watson, M. D., Dubuque, Iowa; W. C. Wile, M. D., Sandy Hook, Conn.; A. H. Wilson, M. D., Boston, Mass.

At an informal meeting of the Committee, held at New Orleans during the session of the American Medical Association, in April, 1885, Dr. R. Beverly Cole, of San Francisco, Cal., was elected temporary Chairman, and Dr. John V. Shoemaker, of Philadelphia, Pa., was elected temporary Secretary.

Just before the final adjournment of the Association the following was adopted:

Resolved, That the Committee appointed in pursuance of a resolution adopted by this Association, April 30, 1885, to constitute an addition to the original Committee of seven previously appointed to invite and make arrangements for the meeting of the International Medical Congress, to be held in Washington, D. C., in 1887, be, and the said Committee is hereby, authorized and empowered to select a Chairman and a Secretary, and to fill all vacancies that may occur by death or inability to attend the Committee meetings, and to appoint the officers of the Congress.

This resolution has been construed as eliminating from the "General Committee" the President of the American Medical Association, added by vote, and, also, the members added by the "Original Committee," in accordance with the authority given it at the previous annual meeting of the Association. It is claimed that the wording of this resolution, whatever may have been its intent, is not conclusive that, by the passage of that resolution, the Association rescinded its act of a year before, when it authorized such additions to the membership of the "Original Committee." The two material points of this resolution are, that it is held by some that it left the status of the twenty-eight members added, in doubt; and that it definitely "empowered" its second "enlarged" Committee of Arrangements "to appoint the officers of the congress."

The second enlarged Committee held its first meeting at

Chicago, Ill., on June 24th and June 25th, 1885, for the purposes of organization and the transaction of the business committed to it by the American Medical Association.

In order to facilitate the holding of meetings in different sections of the country, the Committee deemed it advisable to select a Vice-Chairman, in addition to a Chairman and a Secretary.

The following named members were present at the meeting held in Chicago:

- G. Baird, M. D., Wheeling, W. Va.
- Robert Battey, M. D., Rome, Ga.
- F. W. Beard, M. D., Vincennes, Ind.
- J. S. Billings, M. D., Washington, D. C.
- R. Beverly Cole, M. D., San Francisco, Cal.
- E. P. Cook, M. D., Mendota, Ill.
- W. E. Duncan, M. D., Ellendale, Dakota Ter.
- Ellsworth Eliot, M. D., New York City.
- N. F. Essig, M. D., Plattsburg, Mo.
- G. F. French, M. D., Minneapolis, Minn.
- A. Y. P. Garnett, M. D., Washington, D. C.
- John B. Hamilton, M. D., Washington, D. C.
- I. M. Hays, M. D., Philadelphia, Pa.
- George A. Ketchum, M. D., Mobile, Alabama.
- D. A. Linthicum, M. D., Helena, Ark.
- John S. Lynch, M. D., Baltimore, Md.
- J. W. McLaughlin, M. D., Austin, Texas.
- X. C. Scott, M. D., Cleveland, O.
- Nicholas Senn, M. D., Milwaukee, Wis.
- John V. Shoemaker, M. D., Philadelphia, Pa.
- F. L. Sims, M. D., Memphis, Tenn.
- A. R. Smart, M. D., Hudson, Mich.
- D. W. Stormont, M. D., Topeka, Kan.

E. F. Upham, M. D., West Randolph, N. Y.

W. H. Wathen, M. D., Louisville, Ky.

W. Watson, M. D., Dubuque, Iowa.

A. H. Wilson, M. D., Boston, Mass.

The resignation of Dr. Austin Flint, of New York, as a member of the Committee, was presented and accepted. Dr. J. W. S. Gouley, New York, was elected to fill the vacancy, and took his seat with the Committee.

The Committee then organized, a majority of its members being present, by the election of the following officers :

Chairman, Dr. R. Beverly Cole, San Francisco, Cal.

Vice-Chairman, Dr. John S. Lynch, Baltimore, Md.

Secretary, Dr. John V. Shoemaker, Philadelphia, Pa.

After the organization of the Committee, the number of members necessary for a quorum for future meetings was fixed at fifteen.

The following preamble and resolution were adopted, to apply to future meetings of the Committee :

“WHEREAS.—It is expedient that the meetings of this Committee shall represent, as far as practicable, the profession of all portions of our country,

“*Resolved*.—That any member of this Committee who may be unable to attend a meeting, shall be empowered to send as his proxy for the meeting any member of the American Medical Association, in good professional standing and a resident of his State or a member of his Government Department.”

It was agreed that members of the Committee of Arrangements should not be elected officers of the Congress.

Under the instructions embodied in the Association's resolution, the committee proceeded to “review, alter and amend the action of the original committee of eight, by the adoption of the following general plan of organization.

1. The Congress shall be composed of members of the

regular medical profession, who shall have inscribed their names on the register, and taken out their tickets of admission.

The American members of the Congress shall consist of delegates from the American Medical Association, and the medical societies in affiliation with the American Medical Association, each of said societies being entitled to appoint one delegate for every ten of its members.

The members of all special and subordinate committees, appointed by the Committee of Arrangements, shall also be entitled to membership in the Congress, and such other scientific men as are approved by the Executive Committee,

All societies entitled to representation are requested to elect their delegates at their last regular meeting preceding the meeting of the Congress, and to furnish the Secretary-General with a certified list of the delegates so appointed.

2. The work of the Congress shall be divided into sixteen sections, as follows, namely :

1. Medical Education, Legislation and Registration, including methods of teaching, and buildings, apparatus, etc., connected therewith.

2. Anatomy.

3. Physiology.

4. Pathology.

5. Medicine.

6. Surgery.

7. Obstetrics and Gynæcology.

8. Ophthalmology.

9. Otology.

10. Dermatology and Syphilis.

11. Laryngology.

12. Public and International Hygiene.

13. Collective Investigation, Nomenclature, Vital Statistics and Climatology.

14. Military and Naval Surgery and Medicine.
15. Practical and Experimental Therapeutics.
16. Diseases of Children.

3. The general meetings shall be reserved for the transaction of the general business of the Congress, and for addresses or communications of scientific interest more general in character than those presented in the Sections.

4. Questions which have been agreed upon for discussion in the Sections shall be introduced by members previously nominated by the officers of the Sections. The members who may be appointed to open the discussions shall present, in advance, a statement of the conclusions which they have formed as a basis for debate.

5. Notices of papers to be read in any of the Sections, together with the abstracts of the same, must be sent to the Secretary of that Section before April 30, 1887. These abstracts will be regarded as confidential communications, and will not be published until the meeting of the Congress. Papers relating to questions not included in the list of subjects suggested by the officers of the various Sections will be received. Any member, after April 30, wishing to bring forward a subject not upon the programme, must give notice of his intention to the Secretary-General at least twenty-one days before the opening of the Congress. The titular officers and Council of each Section shall decide as to the acceptance of any communication offered to their Section, and shall fix the time of its presentation. No communication will be received which has been already published or read before a Society.

6. All addresses, papers and discussions made either at general meetings or in the Sections are to be immediately handed to the Secretaries. The Executive Committee, after the

conclusion of the Congress, shall proceed with the publication of the Transactions, and shall have full power to decide which papers shall be published, and whether in whole or in part.

7. The official languages are English, French and German.

In the Sections no speaker will be allowed more than ten minutes, with the exception of readers of papers and those who introduce debates, who may occupy twenty minutes.

8. The rules, programmes and abstracts of papers shall be published in English, French and German.

Each paper or address will appear in the Transactions in the language in which it was delivered by the author. The debates will be printed in English.

9. The officers of the Committee of Arrangements shall be a Chairman, Vice-Chairman and a Secretary.

10. There shall be an Executive Committee, to be composed of the Chairman, Vice-Chairman, Secretary-General, Treasurer, the Chairman of the Finance Committee, the Secretary and five other members, to be elected by the Committee of Arrangements. The duties of the Executive Committee shall be to carry out the directions of the Committee of Arrangements, to authorize such expenditures as may be necessary, and to act for the Committee during the intervals of its sessions, reporting such action at the next meeting of the Committee, for approval.

11. There shall be a Standing Committee on Finance, composed of one person from each State, Territory, the District of Columbia, the Medical Departments of the Army, Navy and the Marine Hospital Service. The Chairman of the Finance Committee shall be *ex officio* one of the Vice-Presidents of the Congress, and also a member of the Executive Committee. The Committee of Arrangements shall appoint

the Finance Committee, and each State chairman appoint the local Finance Committee of one from each Congressional District.

12. The officers of the Congress shall be a President, such number of Vice-Presidents as may hereafter be determined on, a Secretary-General, two Assistant Secretaries, also to be hereafter appointed, and a Treasurer, and those elected to these positions will be nominated by the Committee of Arrangement, to hold the same offices in the Congress.

Dr. Austin Flint was continued as President of the congress, as were many of the other officers previously selected. In fact, the personnel of the congress was not greatly changed. Two of the Vice-Presidents were not continued, and eleven others were added. The Secretary-General declined to be continued, and another was elected to that office.

The number of the sections was reduced from nineteen to sixteen, by merging sections. Twelve of the Presidents of sections remained unchanged. The merging of sections changed three of the presidents, and four others were not continued.

In the offices of Vice-President, Secretary and Council, the principal changes made were in enlarging the number of each.

The principal changes made in the rules for the government of the congress consisted in requiring that "the American members of the congress shall consist of delegates from the American Medical Association, and the medical societies in affiliation with the American Medical Association," which restricted the American membership even more than the conditions imposed by the "original enlarged committee," and made the same mistake of proposing two classes of members for the congress. Another change reduced the number of the sections, and, consequently, of presidents of sections, as pre-

viously stated. But little change was made regarding the organization and the work of the sections.

Having progressed thus far toward the organization of the congress, the Committee of Arrangements adjourned.

After the adjournment it was charged that the action taken was partisan, hasty and ill-advised, and in contravention of the best interests of the congress, for which alleged reasons numerous resignations from the organization occurred.

The second meeting of the Committee of Arrangements was held in New York city, on the 3rd of September. The following named members were present :

Dr. G. Baird, Dr. Robert Battey, Dr. L. P. Bush, Dr. R. Beverly Cole, Dr. W. C. Dabney, Dr. Ellsworth Eliot, Dr. A. Y. P. Garnett, Dr. S. C. Gordon, Dr. J. W. S. Gouley, Dr. J. B. Hamilton, Dr. George A. Ketchum, Dr. R. A. Kinloch, Dr. D. A. Linthicum, Dr. John S. Lynch, Dr. R. C. Moore, Dr. William Pierson, Dr. N. J. Pitman, Dr. L. A. Sayre, Dr. X. C. Scott, Dr. John V. Shoemaker, Dr. F. L. Sim, Dr. E. F. Upham, Dr. W. H. Wathen, Dr. W. C. Wile, Dr. A. H. Wilson.

Other members were represented by proxies :

Dr. E. P. Cook, by Dr. N. S. Davis, proxy; Dr. A. R. Smart, by Dr. William Brodie, proxy; Dr. J. M. Taylor, by Dr. E. P. Sale, proxy.

The committee was called to order September 3rd, 1885, by the Chairman, Dr. R. Beverly Cole.

The resignation of Dr. L. A. Sayre, of New York, as member of the committee was tendered in consequence of his ill-health. It was accepted, and Dr. A. Flint, Jr., of New York, was elected to fill the vacancy and took his seat with the committee.

There were seven vacancies in the Committee of Arrangements, and the following gentlemen were elected to fill their vacancies :

Dr. J. Bartlett, Wisconsin; Dr. J. H. Baxter, U. S. Army; Dr. George Goodfellow, Arizona; Dr. Henry Leffman, Pennsylvania; Dr. John Morris, Maryland; Dr. J. R. Tipton, New Mexico; Dr. Thomas J. Turner, U. S. Navy.

It was decided that no person should occupy more than one position in the organization of the congress.

It was also decided that, in the published lists of the officers of the congress, the names of the Vice-Presidents and Secretaries of the congress, and the Vice-Presidents, Secretaries and members of Councils of the Sections, should be arranged alphabetically.

The Section of Medical Education was discontinued. The Sections of Gynæcology and Psychological Medicine and Diseases of the Nervous System, and of Dental and Oral Surgery were restored. The Section of Laryngology was united with that of Otology.

In the interval between the first meeting of the committee in Chicago, in June, and the second meeting in New York, in September, it had become evident that it was not best to make two classes of members of the congress, and that no effort should be made to make the congress a delegated body. Therefore the Committee of Arrangements wisely concluded to remove all previous restrictions imposed, and to make the requirements for membership as liberal as they had been in any congress yet held, and adopted the following plan of organization :

THE RULES ADQPTED ARE :

1. The congress shall consist of members of the regular profession of medicine, who shall have inscribed their names on the register and shall have taken out their tickets of admis-

sion; and of such other scientific men as the Executive Committee of the congress may see fit to admit.

2. The dues for members of the congress shall be ten dollars each for members residing in the United States.

There shall be no dues for members residing in foreign countries.

Each member of the congress shall be entitled to receive a copy of the "Transactions" for 1887.

3. The congress shall be divided as follows, into seventeen sections:

I. General Medicine.

II. General Surgery.

III. Military and Naval Surgery.

IV. Obstetrics.

V. Gynæcology.

VI. Therapeutics and Materia Medica.

VII. Anatomy.

VIII. Physiology.

IX. Pathology.

X. Diseases of Children.

XI. Ophthalmology.

XII. Otology and Laryngology.

XIII. Dermatology and Syphilis.

XIV. Public and International Hygiene.

XV. Collective Investigation, Nomenclature, Vital Statistics, and Climatology.

XVI. Psychological Medicine and Diseases of the Nervous System.

XVII. Dental and Oral Surgery.

4. The general meetings of the congress shall be for the transaction of business and for addresses and communications of general scientific interest.

5. Questions and topics that have been agreed upon for discussion in the sections shall be introduced by members previously designated by the titular officers of each section. Members who shall have been appointed to open discussions shall present in advance statements of the conclusions which they have formed as a basis for debate.

6. Brief abstracts of papers to be read in the sections shall be sent to the secretaries of the proper sections on or before April 30, 1887. These abstracts shall be treated as confidential communications, and shall not be published before the meeting of the congress.

Papers relating to topics not included in the lists of subjects proposed by the officers of the sections may be accepted after April 30, 1887; and any member wishing to introduce a topic not on the regular lists of subjects for discussion shall give notice of the same to the secretary-general, at least twenty-one days before the opening of the congress, and such notices shall be promptly transmitted by the secretary-general to the presidents of the proper sections. The titular officers of each section shall decide as to the acceptance of such proposed communications and the time for their presentation.

7. All formal addresses, scientific communications and papers presented, and scientific discussions held at the general meetings of the congress, shall be promptly given in writing to the secretary-general; and all papers presented and discussions held at the meetings of the sections shall be promptly given in writing to the secretaries of the proper sections.

No communication shall be received which has already been published, or read before a society.

The Executive Committee, after the final adjournment of the congress, shall direct the editing and the publication of its "Transactions," and shall have the full power to publish the

papers presented and the discussions held thereon, either in full, in part, or in abstract, as in the judgment of the committee may be deemed best.

8. The official languages of the congress shall be English, French and German.

In the meetings of the sections, no member shall be allowed to speak for more than ten minutes, with the exceptions of the readers of papers and those who introduce subjects for discussion, who may each occupy twenty minutes.

9. The rules and programmes shall be published in English, French and German.

Each paper and address shall be printed in the "Transactions" in the language in which it was presented, and preliminary abstracts of papers and addresses also shall be printed, each in the language in which it is to be delivered.

All discussions shall be printed in English.

10. The president of the congress, the secretary-general, the treasurer, the chairman of the Finance Committee, and the presidents of the sections, shall together constitute an Executive Committee of the congress, which committee shall direct the business of the congress, shall authorize all expenditures for the immediate purposes of the congress, shall supervise and audit the accounts of the treasurer, and shall fill all vacancies in the offices of the congress and of the sections. This committee shall have power to add to its membership, but the total number of members shall not exceed thirty. A number equal to one-third of the members of the committee shall constitute a quorum for the transaction of business.

11. The officers of the congress shall be a president, vice-presidents, a secretary-general, four associate secretaries, one of whom shall be the French secretary, and one of whom

shall be the German secretary, a treasurer, and the chairman of the Finance Committee.

12. The officers of each section shall be a president, vice-presidents, secretaries, and a council.

13. The officers of the congress and the officers of the sections shall be nominated to the congress at the opening of its first session.

14. The Executive Committee shall, at some convenient time before the meeting of the congress, prepare a list of foreign vice-presidents of the congress and foreign vice-presidents of the sections, to be nominated to the congress at the opening of its first session.

15. There shall be a standing Committee on Finance, composed of one representative from each state and territory, the District of Columbia, the medical department of the army, the medical department of the navy, and the marine hospital service.

The chairman of the Finance Committee shall report to the Executive Committee of the congress.

Each member of the Finance Committee shall appoint a local Finance Committee for his state, territory, district, or government department, consisting of one or more members from each government department or congressional district.

Each local Finance Committee shall report through its chairman to the chairman of the Finance Committee of the congress.

The committee then proceeded to fill the more important positions found to be vacant in the organization of the congress. The following is a correct list of the general officers of the congress, including Vice-Presidents, and also the Presidents of the seventeen sections :

PRESIDENT.

Austin Flint, M. D., LL. D., New York.

VICE-PRESIDENTS.

W. O. Baldwin, M. D., Alabama ; *H. I. Bowditch, M. D., Massachusetts ; William Brodie, M. D., Michigan ; *Henry F. Campbell, M. D., Georgia ; W. W. Dawson, M. D., Ohio ; *R. Palmer Howard, M. D., Canada ; E. M. Moore, M. D., New York ; Tobias G. Richardson, M. D., Louisiana ; Lewis A. Sayre, M. D., New York ; J. M. Toner, M. D., District of Columbia ; the President of the American Medical Association ; the Surgeon-General of the United States Army ; the Surgeon-General of the United States Navy ; the Supervising Surgeon-General of the United States Marine Hospital Service.

SECRETARY-GENERAL.

Nathan S. Davis, M. D., LL. D., Chicago, Illinois.

TREASURER.

E. S. F. Arnold, M. D., M. R. C. S., New York.

CHAIRMAN OF THE FINANCE COMMITTEE.

Frederick S. Dennis, M. D., M. R. C. S., New York.

EXECUTIVE COMMITTEE OF THE CONGRESS.

GENERAL OFFICERS.

Austin Flint, M. D., LL. D., President of the Congress.

Nathan S. Davis, M. D., LL. D., Secretary-General.

E. S. F. Arnold, M. D., M. R. C. S., Treasurer.

Frederick S. Dennis, M. D., M. R. C. S., Chairman of the Finance Committee.

PRESIDENTS OF THE SECTIONS.

General Medicine.—Abram B. Arnold, M. D.

General Surgery.—William T. Briggs, M. D.

*Since resigned.

Military and Naval Medicine and Surgery.—Henry H. Smith, M. D.

Obstetrics—DeLaskie Miller, M. D., Ph. D.

**Gynæcology*.—Robert Battey, M. D.

Therapeutics and Materia Medica.—F. H. Terrill, M. D.

Anatomy.—William H. Pancoast, M. D.

**Physiology*.—John C. Dalton, M. D.

**Pathology*.—E. O. Shakespeare, M. D.

Diseases of Children.—J. Lewis Smith, M. D.

Ophthalmology.—A. W. Calhoun, M. D.

Otology and Laryngology.—S. J. Jones, M. D., LL. D.

Dermatology and Syphilis.—A. R. Robinson, M. D.

Public and International Hygiene.—Joseph Jones, M. D.

Collective Investigation, Vital Statistics, and Climatology.
—Henry O. Marcy, M. D.

Psychological Medicine and Nervous Diseases.—John P. Gray, M. D., LL., D.

Dental and Oral Surgery.—Jonathan Taftt, M. D.

LOCAL COMMITTEE OF ARRANGEMENTS.

(With power to increase the number.)

A. Y. P. Garnett, M. D., Chairman, Dist. of Columbia.

The Surgeon-General U. S. Army.

The Surgeon-General U. S. Navy.

The Supervising Surgeon-General U. S. Marine Hospital Service.

J. H. Baxter, M. D., District of Columbia.

C. H. A. Kleinschmidt, M. D., District of Columbia.

N. S. Lincoln, M. D., District of Columbia.

J. M. Toner, M. D., District of Columbia.

*Since resigned.

Lists of Vice-Presidents, Secretaries, and Councilmen for each section were named by the Committee of Arrangements, but as it was not practicable to ascertain at once who would accept the places assigned them, or who of those who had been announced in the medical press as declining to accept positions before the present rules and organization had been adopted as given above might wish to withdraw such declination, the final adjustment of these offices was referred to the Executive Committee of the congress, and all correspondence in relation thereto was transferred to the Secretary-General of the congress.

Having thus selected the officers of the congress and the presidents of the sections, who together were made an "Executive Committee," the committee of arrangements considered its work practically completed, and placed the affairs of the congress in charge of the "Executive Committee," and now awaits the assembling of the American Medical Association in St. Louis, in May next, to report the completion of the work assigned to it by the Association, whereupon the Association will be in position to say to the medical profession of the country that it discharged the duty undertaken by it, of extending an invitation to have the ninth congress held in Washington; that the invitation was accepted and that, through its committee of arrangements, the congress has been organized and the affairs of the congress placed in charge of the executive committee of the congress, and that the Association need no longer regard itself as holding any official relation to the congress.

It was with this understanding of its status that the Executive Committee assumed the management of the work of the congress, and it so announced after its first meeting and organization.

The first meeting of the executive committee of the congress occurred in New York city on September 24th, and was organized by electing Henry H. Smith, M. D., Chairman. The office of Associate Secretary-General was created, and F. S. Dennis, M. D., was elected to that office, and R. J. Dunglison, M. D., was elected chairman of the finance committee, in place of F. S. Dennis, transferred.

After the transaction of some routine business, and directing that an official announcement be made that the preliminary organization of the congress had been effected, the committee adjourned.

The second meeting of the executive committee occurred in New York city on November 18th. There being vacancies in the office of President of three of the sections, the executive committee numbered nineteen; of these, fifteen were present.

R. J. Dunglison, M. D., was elected permanent Secretary of the committee. Some routine business was transacted, and some vacancies in some of the sections were filled.

Then, acting under the authority conferred upon the executive committee by rule ten, and as contemplated by the committee of arrangements when it transferred the affairs of the congress to the executive committee, the latter committee unanimously elected six additional members of the committee, viz.:

J. S. Billings, M. D., U. S. Army ; J. M. Browne, M. D., U. S. Navy; Christopher Johnston, M. D., of Baltimore, and G. J. Engleman, M. D., of St. Louis, all of the "original committee", and, also, William Pepper, M. D., and J. M. Da Costa, M. D., both of Philadelphia.

It was then decided to postpone the filling of the other vacancies, including the presidencies of the three sections, in

order that the newly-elected members might participate in filling them, if they should accept the positions to which they had been elected.

This course on the part of the committee was taken in recognition of the fact that there exists much misunderstanding in the profession regarding the organization of the congress, which fact has prevented the cordial coöperation of many whose recognized rank in the medical profession entitles them to prominent positions in a congress, international and important in character. The committee appreciated the fact that it now stands in a capacity of trust, not alone for the medical profession of the United States, much less for factions in it, but for the entire medical profession that is expected to participate in the congress, and that its course of action should be such as would give evidence that it appreciated the fact and felt the responsibility that attaches to such an important trust. It therefore sought, in making selection of those to be added, to elect such as would properly represent those not represented in the preliminary organization. Having done this, the committee adjourned, and awaits the action of the newly-elected members.

The American Academy of Medicine was organized in 1876, mainly with a view of encouraging a more liberal preliminary education of those contemplating the study of medicine, in the belief that this is the first and most important step toward securing a higher standard of medical education in the United States. The Academy has steadily grown until its membership now embraces about three hundred physicians, who have received the degree of Bachelor of Arts, in course, from recognized colleges or universities.

Having secured a recognized position, and exerted a bene-

ficial influence on the medical profession of our country, it is believed by many members of the Academy that its sphere of usefulness may be still further extended by admitting to membership physicians who have justly attained prominence in our profession, and, as an evidence thereof, and as a reward for good work accomplished, have received honorary degrees, from reputable institutions.

This enlargement was advocated by President Gihon in his annual address, at the last annual meeting of the Academy, in New York, in October, and the subject will be considered at the next annual meeting of the Academy, in Pittsburg, in September, 1886, just ten years after its organization.

The Annual Report of the Surgeon-General of the United States Army, 1885, is a pamphlet of 93 pages, which presents the medical statistics of the army and details as to the work of the Surgeon-general's office, with the precise carefulness which has marked all the publications having the same imprint for all the years since the civil war. The mean strength of the army for the year is set down as 24,035. This body of men furnishes 36,829 records of admission for hospital or other treatment, with 263 deaths. The order of the diseases, as they occurred, possesses some interest, as the soldiers were presumably scattered throughout all parts of the American Union, and hence the average, in some small measure, represents the average of diseases of men in similar hygienic environment all over the country, women, of course, being excluded. First come traumas, which may be, perhaps, set down as in a sort peculiar to the army life; second, diseases of the respiratory tract; next, those diseases of the gastro-intestinal tract producing diarrhœa and kindred maladies; next, the malarial group of troubles; and then, in the order named, digestive disorders exclusive

of tonsilitis; nervous affections, from headache to those of a severer grade, exclusive of insanity; disorders connected with alcoholism; the venereal diseases, exclusive of constitutional syphilis; tonsilitis; and lastly, cutaneous disorders. The army medical museum received a large addition during the year. It is interesting to note that the 3rd medical volume of the Medical and Surgical History of the War, the last of this series, will probably be completed during the coming winter.

The Annual Report of the Surgeon-General of the United States Navy, is comprised in a pamphlet of nine pages, which, being printed at the Government Printing Office instead of by the Bureau itself, compares unfavorably in typographical appearance with the Army Report. In the force afloat for the year, represented by the figures 9,959, there were 78,659 entries of sick on the rolls, the traditions of the navy being such that a man who is ill for six days counts as six men in the same condition for one day. The order of diseases represented in the list is, first, violent diseases and deaths; next, constitutional diseases; and then, diseases of the genito-urinary system; of the integumentary system; of the digestive system; zymotic diseases; respiratory diseases, etc. The difference between the health of the army and of the navy with respect to the class of disorders affecting the respiratory organs is most marked, and is highly suggestive of the salubrity of the sea and the modifications impressed by it upon the climate.

Special attention should be directed to the museum of hygiene under the charge of Medical-director Browne. A large number of contributions have been made to it during the year, such as articles illustrating drainage, plumbing, water-supply, ventilation, household-health, disposing of the dead, etc., and books, instruments, etc.

On the outside of the museum is being constructed a complete system of iron and lead pipes, with fixtures, running from the ground to the roof, with an observing station at each of the three stories, for an exhaustive series of experiments covering all the topics in dispute relating to trap-siphonage, and the utility of the mechanism of water-closets, traps, water-basins, baths, sinks, etc. The results of this novel enterprise on the part of the Bureau will be watched with interest, as the experiments will be conducted in the cause of science alone, uninfluenced by any of the commercial interests which, it is feared, have too often given coloring to results supposed to have been obtained in experiments, presumably conducted in the interest of sanitary science. The work in this museum has been conducted without ostentation, and but few are aware how much this collection of models and plans and sanitary devices will yet influence sanitation at sea and on land. A liberal appropriation by congress for the further development of the work undertaken in the formation of this valuable museum, will enable those directing it to carry out their cherished plan of making it useful in the direction of prevention of sickness, rather than of its remedy, which is now engaging the attention of sanitarians, who recognize in it the highest calling of the physician.

DOMESTIC CORRESPONDENCE.

JEWELL CITY, KANSAS, Nov. 3rd, 1885.TO THE EDITORS OF THE *Chicago Medical Journal and Examiner*.*Gentlemen:*

The following is an incomplete history of a case which, if deemed interesting, please use as you see proper.

On January 22nd, 1885, I was called to see Mrs. N. J., age twenty-six years, mother of five children, who had been confined to her bed for the past twelve weeks by what her physician called typhoid fever. Her youngest child was about two weeks old when the fever came on. I found her greatly emaciated, delirious, and with tongue heavily coated. Temperature 102° F. Her pulse 128° per minute. There was complete anorexia and some thirst. I was told that she had been "troubled with bloating for about four weeks." Upon inquiry, as to the action of her kidneys, I was told that she passed urine frequently, but only a little at each time, and that she had been taking a diuretic for some time to correct that trouble. Upon passing my hand over the emaciated walls of the abdomen, I could feel the urinary bladder greatly distended. Objection was made to my passing a catheter, as "she passed water nearly all the time." After emptying the bladder, the quantity of urine obtained was so large that I measured it, accurately, and found it to be sixty-one and one-half fluid ounces, or a little more than ten [?] pints. After this the bladder was emptied three or four times during each twenty-four hours. The patient became rational; her tongue

cleared off; her appetite improved, and her sleep became natural; but the patient being emaciated more than anything that I ever expected to see, died on the 26th from inanition.

The only point of interest in this case is the great quantity of urine obtained from this patient at one time, which far exceeds the quantity that the bladder is generally believed to be capable of holding. It is a much larger quantity than I have ever heard of, and I thought it might be interesting to others.

Respectfully yours,

F. A. BUTTERFIELD.

FŒTUS COMPRESSUS.

TO THE EDITORS OF THE *Chicago Medical Journal and Examiner*.

Gentlemen:

On April 19th, 1879, I was called to attend Mrs. P., 25 years old, of nervous temperament, healthy, good family history, in her first confinement. After a somewhat protracted, though normal labour, she was delivered of a fairly nourished female child, weighing eight pounds. Immediately preceding the expulsion of the placenta, which followed a few minutes after the birth of the child, a four months' *fœtus compressus* was expelled. The head of the fœtus was flattened from side to side and turned with the chin to the shoulder, while the body was flattened from before backward. The placenta was not examined closely. The mother had some pain and hæmorrhage at the fourth month, which was controlled by rest and opium. She was fully as large at four as at six months, growth seeming to stop after these symptoms until the latter months of pregnancy. The living child never seemed robust and died at the age of three months, from whooping-cough. The mother has

been delivered of three children since,—all normal labours,—and all the children are living and healthy at the present time. The *fœtus* was a male.

MILES F. PORTER, M. D.

Fort Wayne, Indiana.

SOCIETY REPORTS.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, November 4th, 1885.—The PRESIDENT, C. T. PARKES, M. D., in the chair.

NERVOUS PAROXYSM, OR SYNCOPE, was the subject of a paper by DR. H. T. BYFORD. He read the report of two fatal cases, which had not occurred in his own practice, and traced the cause of death to strangulation by medicine given during the paroxysms. The third case reported occurred in his own practice and recovered, no attempt at internal medication having been made during the paroxysms. After a recital of the cases, the author proceeded to describe this hitherto imperfectly recognized form of nervous paroxysm, which, in the books and in practice, is often confounded with true syncope, hysteria and other conditions, but which is in reality more in the form of convulsions.

In the cases which he had treated, the most common exciting causes lay in the digestive system, but he thought subsequent observations would demonstrate that the exciting causes might also be due to some disturbance of the cutaneous, osseous, sexual or urinary systems. The predisposing causes are debility, plethora, sudden change of habits, severe strains upon vital forces, parturition, functional or organic diseases, etc.

“Sketches of some of the Original Members of the Delaware State Medical Society.” By LEWIS P. BUSH, A. M., M. D., of Wilmington, Delaware.

In his address the President of the Academy advocated an extension of the conditions of membership in the Academy, in the belief that its usefulness will be still further increased. The matter will be considered at the next annual meeting.

Relative to preliminary education for medical students, which has been one of the important objects for which the Academy was organized, the following resolution was adopted:

Resolved, That a committee of three be appointed by the President, to report at the next annual meeting, instructed to prepare a statement of the best preliminary education for medical students, and also a statement of the minimum attainment which medical schools should require of students before admitting them to the study of medicine.

It was also resolved that a committee of two be appointed, “whose duty it shall be to report on the requirements as to preliminary education of the various medical colleges in the United States and in Canada.” The newly elected members of the Academy are:

Drs. S. M. Nelson, Cambridge, Mass; J. H. W. Chestnut, Philadelphia; Rufus W. Bishop, Chicago; E. E. Mariott, Springfield, Mass.; George N. Acker, Washington, D. C.; H. V. Logan, Scranton, Pa.; H. W. Elmer, Bridgton, N. Y.; H. F. Hansell, Philadelphia; E. W. Cushing, Boston, Mass.; J. S. Wight, Brooklyn, N. Y.; William Osgood, North Yarmouth, Me.; C. A. Packard, Bath, Me.; W. K. Oake, Auburn, Me.; A. Mitchel, Brunswick, Me.; D. A. Robinson, Bangor, Me.; C. A. Ring, Portland, Me.; J. A. Spaulding, Portland, Me.; G. W. Marshall, Milford, Del.; Wm. A. Hugie, Charleston, S. C.; J. B. Shapley, St. Louis, Mo.; M. H. Post, St. Louis, Mo.; C. E. Briggs, St. Louis, Mo.; J. S. Alleyman, St.

Louis, Mo.; N. S. Davis, Jr., Chicago, Ill., and Charles Edgar Cook, Mendota, Illinois. Dr. Henry H. Smith and Dr. S. Weir Mitchell, of Philadelphia were elected to honorary membership.

The following were elected as the officers for the ensuing year :

President—Dr. R. S. Sutton, of Pennsylvania.

Vice-Presidents—Drs. L. P. Bush, of Delaware; S. J. Jones, of Illinois; R. L. Sibbett, of Pennsylvania and F. H. Gerish, of Maine.

Secretary and Treasurer—Dr. R. J. Dunglison, of Pennsylvania.

Assistant Secretary—Dr. C. McIntyre, of Pennsylvania.

Pittsburg, Pa., was selected as the place for the next annual meeting, on the third Tuesday in September, 1886. The Academy then adjourned.

PHILADELPHIA ACADEMY OF SURGERY.

A meeting of the Philadelphia Academy of Surgery was held October 5, 1885, Vice-President Dr. R. J. Levis in the chair.

FOREIGN BODY CAUSING VESICAL CALCULUS.

DR. J. EWTNG MEARS: I desire to present to the Academy a urinary calculus removed from a patient in St. Mary's Hospital three weeks ago. The patient was a man from the interior of the State, fifty-six years of age, who had been suffering with bladder-trouble for nine months. There had been difficult micturition with pain, and the diagnosis of inflammation of the bladder had been made. Six months ago, in order to relieve the difficulty in passing water, he said that he had introduced a straw some two or three inches long. He

was under the influence of liquor at the time, and the straw slipped from his grasp and entered the urethra. His symptoms then became more marked, and he came to this city. I introduced a sound, and discovered in the bladder the stone or mass which you see. The urine was carefully examined, and it was found to contain a large quantity of albumen and also phosphatic deposits. The question arose, in view of the man's habits, his age, and the condition of the urine, whether it would be better to perform lithotomy or lithotrity or litholapaxy. Under the circumstances, I considered lithotomy the preferable operation.

I cut the man, and in so doing opened an abscess in the prostate, evacuating about an ounce of pus. I then entered the bladder and removed this cluster of calculi with a scoop. The bladder was then washed out, and in two weeks the man returned to his home with the wound entirely closed. At the end of this time, examination of the urine showed that its character was greatly improved.

It was certainly fortunate that section of the perineum was decided upon. The abscess was not recognized before operating, although exploration of the perineum was made. There was no pain, no swelling, and no tenderness.

The question arises, in such cases as this, where the age of the man, his habits, and the composition of the urine indicate serious vesical and possibly renal disease, whether it is better to perform lithotomy or the crushing operation.

DR. LEVIS: How would the introduction of a straw account for this fimbriated character of the mass? If a head of wheat or barley had been passed, it might explain it.

DR. S. W. GROSS: Close examination will show that this is a spear of some grain, and that these little calculi are formed around the hairs of the grain.

EXCISION OF THE SCAPULA.

DR. JOHN BRINTON exhibited a specimen of interest from the magnitude of the operation required for its removal. This was a sarcoma of large size, requiring the extirpation of the entire scapula in a child eleven years old. The operation was unsuccessful as far as the life of the child was concerned, as the patient sank rapidly from the shock, and died an hour after the termination of the operation.

The tumor was fifteen inches in circumference at its base. From the history given it seemed to have originated in a fall.

The child was suffering greatly. The pain during the day-time was paroxysmal, but at night almost continuous. The following is Dr. Brinton's description of his method of operating: "I made an incision, carrying it to the posterior edge of the scapula. The incision was not at first carried the entire length, because I wished to divide the acromio-clavicular articulation as soon as possible. The idea was to save every drop of blood that could possibly be saved. I had gathered from the reports of cases that the great peril was from hemorrhage. I therefore commenced with a moderate incision, so as to divide the acromio-clavicular articulation. The incision was then swept across to the posterior portion of the bone. An incision was next made at right angles, and the incision (somewhat curved) was carried below the angle of the scapula and the four flaps dissected up. Then I commenced at the upper part of the bone, dividing the muscles; and then passed slowly down, dividing the muscles,—taking the precaution, where there was any chance of considerable hemorrhage, to include the mass of muscle within a ligature before dividing it. Where there was no danger, a mass of tissue was grasped between two large forceps, such as I formerly used for the extraction of bullets. The incision was then carried along the

posterior border and the muscles divided ; it was next carried under the inferior angle of the bone and the parts raised. The incision upon the anterior costa of the scapula was carried up, the vessels being compressed ; and thus the parts being lifted, I opened the capsular ligaments and turned out the head of the humerus. I next divided the heads of the muscle attached to the coracoid process. I had already divided the muscles along the spine. The bone was then readily lifted up and the hemorrhage was comparatively small. Performing the operation in this way, only one or two vessels required ligature after removal of the bone."

The microscopical examination of this growth by DR. LONGSTRETH shows that it is a well-marked example of round-celled sarcoma.

One other case of complete excision of the scapula was performed by Professor Agnew some years ago. The patient died in a short time from shock. Two partial operations were performed by the late Professor GROSS.

DR. R. J. LEVIS described a method devised by him for a similar case, by which a rubber bandage was made to surround the shoulder and control the hemorrhage.

DR. BRINTON stated that there was no difficulty in compressing the subclavian artery with the fingers in this case.

CONGENITAL MALFORMATION OF COLON.

DR. CHARLES B. NANCREDE: I have here specimens of some little interest. They are the terminal part of the rectum and the caput coli, which were removed from an infant, 50 hours old. The child had been delivered with instruments, and seemed to be in perfect health until the second night, when the nurse sent for me and said that there was something wrong ; that the child was crying and straining, but had not soiled any napkins.

On examination, I found a well-formed anus, into which I could introduce my finger one-third of an inch. It was a female child, and I could therefore make a thorough examination; but I could detect no bulging at any point. As it was twelve o'clock at night and the distention was not great, I gave an opiate, and the next morning at eleven o'clock DR. ASH-HURST met me in consultation. Neither of us could feel any bowel, but we thought it right to make an effort to reach the bowel. I dissected along the hollow of the sacrum up to the promontory, but could not feel the gut. We then decided to perform the operation in the right inguinal region, and I opened what I supposed to be the sigmoid flexure; but it proved at the post mortem to be the caput coli. As soon as the peritoneal cavity was opened, about an ounce of serum escaped, and with it the right Fallopian tube, which was intensely congested. There was marked peritonitis. The child lived four and a half days after the operation. The meconium passed freely, and afterwards the discharges were natural. The child died from exhaustion, evidently due to the peritonitis.

The post mortem showed that if I had detected the bulging bowel, which I must have felt, as it was near the end of my incision, I should almost inevitably cut through two layers of peritoneum. There was a space about as wide as a director where the bowel was not covered by peritoneum, and I should have left behind the peritonitis. The question arises in these cases, if peritonitis does set in so early, and if death results, as it usually does, from peritonitis, whether it is worth while to add the double danger of two operations, especially in female children, where it is impossible to detect any sign of the bowel.

TREATMENT OF CARBUNCLE.

DR. JAMES COLLINS: I have lately treated two cases of carbuncle on the back of the neck, by a method which seems to

have some advantages. The patient is put under the influence of an anæsthetic and a linear incision made. I then take a scoop and remove all the necrosed tissue, and wash the parts thoroughly with an antiseptic solution of mercuric chloride. I then put in a drainage tube, and insert two stitches to bring the central part together. Each day the cavity is thoroughly washed out with the antiseptic solution. The patients have done well, and the cicatrix has been less than after any other method I have tried. The success depends upon the removal of the necrosed tissue and the use of the antiseptic solution.

DR. S. W. GROSS: The plan of Dr. Collins is, I think, based upon proper principles. I consider it far the best operation yet suggested. By scraping away all the dead tissue he gets rid of the micrococci which produce putrefaction, which give rise to the sloughs. The application of the corrosive sublimate destroys the micrococci which line the walls of the cavity, and in that way removes the cause of the disease.

NITROUS OXIDE GAS IN THE EXAMINATION OF FRACTURES.

J. M. BARTON, M. D., read a report of numerous cases of fractures examined while the patient was under nitrous oxide gas. One case of re-fracture of a radius to correct a faulty union was also detailed.

The agent was found to afford sufficient relaxation and freedom from pain to enable one to diagnose and adjust most fractures. Its advantages in all minor operations, of course, are familiar. That it does not cause nausea nor vomiting, even if the stomach be not empty, the slight risk, the immediate recovery permitting the patient to attend at once to his usual avocations, etc., are well known; but in fractures we avoid that period of excitement which appears during the administration of ether, and during which the patient is so likely to further injure the fractured limb.

The period of full anæsthesia is from one to two minutes, but the period of total muscular relaxation is nearly four minutes.

While the anæsthetic is being administered, the injured limb is fully exposed and held by the surgeon. Before the patient is quite unconscious the surgeon feels the limb become limp and lax in his hand; all the muscles are relaxed. The examination can now begin, though the patient gives some slight evidence of feeling pain. This period, the period of total unconsciousness, and the succeeding period of muscular relaxation, gives about four minutes, which will be found to be abundant time to examine almost any fracture.

The apparatus for administering nitrous oxide is now both cheaper and more portable than formerly. The dental depots supply the liquified gas in small receivers, thus doing away with the necessity of tanks and large rubber bags. Its use in surgery will probably increase, notwithstanding that it is slightly more expensive than chloroform or ether.

BOOK REVIEWS.

FOWNES' MANUAL OF CHEMISTRY. *New edition. Royal 12mo, 1056 pages. Philadelphia: LEA BROS. & Co. Chicago: JANSEN, McCLURG & Co.*

The original work of Professor Fownes has been edited several times by Mr. Watts, and finally it became so much altered that it amounted to a new book. Shortly before his death, Watts had completed his "Physical and Inorganic Chemistry," and this forms a part of the present edition. It is no exaggeration to say the work thus improved is among the best ever offered to American students. J. H. L.

A COMPLETE PRONOUNCING MEDICAL DICTIONARY. *By* JOSEPH THOMAS, M. D., LL. D. *Philadelphia: J. B. LIPPINCOTT & Co. Chicago: W. T. KEENER.*

This is an enlargement and modification of another work by the same author, and is especially intended for the assistance of the large number of medical men who have never enjoyed the advantages of a full training in the ancient languages. Besides being a guide to pronunciation, it is quite full on the etymology of medical terms as far as this can be traced; which is certainly a valuable feature and one which will commend it generally. Yet it cannot be said that it fills its mission fully. J. H. L.

A TEXT-BOOK OF PHARMACOLOGY, THERAPEUTICS AND MATERIA MEDICA. By T. LOUDER BRUNTON, M. D., D. SC., F. R. S. *Philadelphia*: LEA BROS & CO. *Chicago*: JANSEN, MCCLURG & Co.

This work has been expected for some years, and in explaining the long delay, the author refers to the time spent in verifying numerous statements collected from various sources.

It is divided into several sections, treating of general pharmacology, general pharmacy, inorganic materia medica, organic materia medica, vegetable materia medica and the animal kingdom.

Each section is properly subdivided, following excellent systems, and pains have been taken to include matter of real interest and importance for those who will use it. On the whole, it seems to be one of the fullest and best works on the subject in the language.

J. H. L.

ITEMS.

A NEW JOURNAL.—A prospectus has been issued, announcing the advent of a new journal, to be published by G. P. Putnam & Sons, of New York, and to be devoted, especially, to the discussion of crime, pauperism, insanity, and idiocy, and to the care of the defective and criminal classes. Although these interests are of great magnitude, so far no special journal seems to have been devoted, exclusively, to the consideration of them.

This one is to be under the editorial management of F. H. Wines, Secretary of *The Illinois State Board of Charities*, who has had large experience in this work. The first number is to appear next month.

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